

- Resolution 71-1 Approval to White Motor Company with respect to 1971-model vehicles greater than 6,000 gross vehicle weight with engine sizes of 331 cu.in. 350, 366, 400, 401, 468 and 478.
- Resolution 71-2 Adoption of a criteria entitled "Air Resources Board Criteria for Determining Compliance with Section 27156 of the Vehicle Code, dated February 17, 1971.
- Resolution 71-3 Volatility of gasoline sold in California with scheduled outlined for the various basins.
- Resolution 71-4
- Resolution 71-5 Permit for Ethyl Corporation
- Resolution 71-6 ABC - Adoption of Section 2109 (h) and 2208 (b) in Title 13 of the California Administrative Code
- Resolution 71-7 ABC Reaffirms the action taken on February 17, 1971 amending Section 1943, 2109 (g) and 2208 (c) of Title 13, California Administrative Code.
- Resolution 71-8 Amending Sections 1942, 2109 (f) and 2208 (b) of Title 13, California Administrative Code.
- Resolution 71-9 ABC Amending Section 2110 (b) of Title 13, California Administrative Code
- Resolution 71-10 U.S. Carburetor permit for testing an experimental motor vehicle pollution control device for a period of one-year beginning with February 17, 1971.
- Resolution 71-11 Two permits for the testing of an experimental emission control device for a period of one-year from March 17, 1971.
- Resolution 71-12 Adopts new Section 1945 in Title 13, California Administrative Code.

- Resolution 71-13 Executive Officer is authorized to execute all documents and contracts for research effort under SB 848
- Resolution 71-14 Form for reporting gasoline volatility , delivery, etc.
- Resolution 71-15 Approval to Impco Division of A. J. Industries (forklifts)  
CA 100 CA 125
- Resolution 71-16 Recommends legislation for 1966 through 1970 model vehicles to establish NO<sub>x</sub> standards in certain counties
- Resolution 71-17 Recommends legislation be enacted for 1955 through 1965 establishing standards for HC - CO and NO<sub>x</sub> for certain counties
- Resolution 71-18 Legislation enacted permitting the Board to require the manufacturers of new vehicles sold in California to make available to the owners of used vehicles manufactured by them any device certified by the Board, manufacturer could be fine \$100 for each vehicle (new) sold in California from the time of its failure to comply with legislation.
- Resolution 71-19 Recommends legislation be enacted so that the CHP and DMV are authorized to enforce control of the emission of lead in certain counties
- Resolution 71-20 Adopts in Title 17 Administrative Code Subchapter 2, Burning, Article 1, Agricultural Burning Guidelines.
- Resolution 71-21 Permits for 2 experimental control devices for Dr. Walter Ott
- Resolution 71-22 Six permits for testing an experimental control device for a period of one-year from March 17, 1971 for Beam Products Manufacturing Co.
- Resolution 71-23 Permit for testing an experimental control device for a period of one-year from March 17, 1971 for Energy Transmission Corporation in Los Angeles
- Resolution 71-24 Not used
- Resolution 71-25 Paser Magnum Device complies with Section 27156 of the Vehicle Code
- Resolution 71-26 Sky Corporation - complies with Section 27156 of the Vehicle Code
- Resolution 71-27 Testing permits for Norris Industries (50)
- Resolution 71-28 Approval for "Controlled Vapor Injection for Mr. R. W. Walters with restrictions
- Resolution 71-29 Approval of Algas Industries utilizing LPG for engine size (e) (f) over 300 cu. in.
- Resolution 71-30 Approval for Toyota with engine size A3

- Resolution 71-31 Policy for allowing limited time extensions to cities and counties to continue to use open fires for the purpose of disposal of solid waste
- Resolution 71-32 Interagency agreement with Public Works for \$125,00 for evaluating emissions from internal combustion engines.
- Resolution 71-33 Permits for 2 experimental testing devices for Anti Irritant Gasoline Combustion Research & Development
- Resolution 71-34 Description of the line proposed by the Solano County Board of Supervisors, approved.
- Resolution 71-35 Description of the line proposed by the Sonoma County Board of Supervisors, approved.
- Resolution 71-36 Rescinding resolutions 70-9C, 70-16C, 70-34C and 70-68B (LPG AND NG CONVERSION ON HEAVY-DUTY VEHICLES FOR TAX PURPOSES)
- Resolution 71-37 Executive Officer authorized to sign contracts with APCD for obtaining air monitoring data in the amount of \$150,000.
- Resolution 71-38 Boundary change for Siskiyou County
- Resolution 71-39 Executive Officer authorized to sing interagency agreement with the Department of Public Works for the sum of \$25,000 for use in planning, construction, operation, and maintenance of the State Highway System.
- Resolution 71-40 Division of Highways granted 12 permits for an experimental vehicle for one year from June 16, 1971
- Resolution 71-41 Policy for approving requests for limited time extensions to cities Counties to continue to use open fires for disposal of solid waste.
- Resolution 71-42 Permit to Chemical Associates of California for one year from June 16.
- Resolution 71-43 Adds Section 1951 and 2509 to Vehicle Code for Heavy Duty vehicles
- Resolution 71-44 Kar products granted fourteen permits for experimental device for one year from June 16, 1971
- Resolution 71-45 Executive Officer authorized to sign contracts with APCD in the South Coast Air Basin and the San Francisco Bay Area Basin not to exceed \$30,000 for the purpose of issuing burning notices.
- Resolution 71-46 Mitsubishi Motors Corporation approval for 1972 light duty vehicles
- Resolution 71-47
- Resolution 71-48 Executive Officer authorized to execute contracts for \$29,000 to obtain necessary wind and temperature data in the North Central Coast Air Basin, the South Coast Air Basin, and the Sacramento Valley Air Basin.
- Resolution 71-49 White Crankcase Liquid Emission Collector, exempt from the prohibitions in Section 27156 of the Vehicle Code.
- Resolution 71-50 Permits for European Car Service for one year from July 21, 1971.
- Resolution 71-51 Approval to Ford Motor Company with respect to the 1972 vehicles greater than 6,000 pounds for 1972 model vehicles

- Resolution 71-52 Nissan Motor Company, Ltd. for 1972-model vehicles, light duty
- Resolution 71-53 Automotive Performance Inc. exempt from the prohibitions in Section 27156 of the Vehicle Code (rescinds 70-5)
- Resolution 71-54 Daimler-Benz approval for their 1972 vehicles, light duty
- Resolution 71-55 Ford Motor Company for its 1972 model vehicles, light duty for their Pinto and Capri
- Resolution 71-56 Chrysler Corporation for their 1972 model vehicles, heavy-duty
- Resolution 71-57 Chrysler Corporation for their 1972 model vehicles, light duty
- Resolution 71-58 Econo-Needle exempt from prohib. of Sec. 27156 for veh. prior to 70-model year with exceptions (Trans-World Marketing, Inc.)
- Resolution 71-59 General Motors approval 72-model vehicles over 6,000 lbs
- Resolution 71-60 Bayerische Motoren Werke approval 72-model vehicles under 6,000
- Resolution 71-61 International Harvester Co approval 72-model vehicles over 6,000
- Resolution 71-62 A B Volvo Car Div approval for 72-models under 6,000
- Resolution 71-63 Triumph Motor Co approval for 72-models under 6,000
- Resolution 71-64 Authorizing Inter-agcy Agreement with Public Health for lab assistance 71-72
- Resolution 71-65 SAAB Scania Automotive Group approval for 72-models under 6,000
- Resolution 71-66 International Harvester Co approval for 72-models under 6,000
- Resolution 71-67 Volkswagen of America Inc approval for 72-models under 6,000
- Resolution 71-68 Jeep Corporation approval for 72-models over 6,000
- Resolution 71-69 Austin-Morris Div. approval for 72-models under 6,000
- Resolution 71-70 American Motors Corp approval for 72-models under 6,000
- Resolution 71-70-A Jeep Corporation approval for 72-models under 6,000
- Resolution 71-71 Dr. Ing. hcF Porsche KG approval for 72-models under 6,000
- Resolution 71-72 Air Quality Products Inc accredited for 55 thru 65 engines as specified
- Resolution 71-73 San Luis Obispo County specified area exempted from agriculture burning guidelines
- Resolution 71-74 Extensions for open fires qualifications
- Resolution 71-75 Adoption of Sec. 1946, Title 13, Chap. 3 Calif. Admin. Code Standards for Exhaust Emissions 73-76
- Resolution 71-76 Fuji Heavy Industries approval for 72-model vehicles under 6,000



- Resolution 71-77 Environmental Technology Div of Dresser Industries permit for testing of experimental device granted
- Resolution 71-78 Low Emission Standards for 72 model year
- Resolution 71-79 Legal description of air-basin boundary (Kern County) amended
- Resolution 71-80 Toyo Kogyo Co Ltd approval for 72-models under 6,000
- Resolution 71-81 Chrysler United Kingdom Ltd approval for 72-models under 6,000
- Resolution 71-82 Approval of ARB Proposal 1A-253-7 submitted by Automotive Environmental Systems Inc
- Resolution 71-83 Approval of ARB Proposal 4E-188-7 by North American Rockwell
- Resolution 71-84 Toyota Motors Company Ltd approval for 72-models under 6,000
- Resolution 71-85 Renault Inc approval for 72-models under 6,000
- Resolution 71-86 Approval of ARB Proposal 4E-259-7 by Dept of Navy and ARB Proposal 4F-230-7 by Meteorology Research Inc
- Resolution 71-86A Amends Resolution 71-86, consolidating research project between Meteorological Research, Inc. and Department of Navy.
- Resolution 71-87 Rescinds Resolutions 63-16 and 63-25; issues resolution of accreditation to Oildex Corporation for crankcase device.
- Resolution 71-88 Pollution Controls Industries, Inc. granted eight permits for testing emission control device.
- Resolution 71-89 Peugeot, Inc. approval for 1972 models under 6,000 pounds.
- Resolution 71-90 "Ionizer" device (James Turner & Associates, Dallas) exempt from 27156 of Vehicle Code.
- Resolution 71-91 ---
- Resolution 71-92 Approves agricultural burning implementation plans as submitted by 21 APCDs.
- Resolution 71-92A Approves agricultural burning implementation plans for Calaveras, Fresno, Madera, Merced, San Joaquin and Tulare APCDs.
- Resolution 71-92B Approves agricultural burning implementation plans for Kings and Tuolumne APCDs.
- Resolution 71-92C Changes fire protection agencies which may issue burning permits in San Benito County APCD.
- Resolution 71-92D Approves agricultural burning implementation plan of Los Angeles County APCD.

Resolution 71-92E	Adds to agencies which may issue burning permits in Yolo-Solano APCD.
Resolution 71-92F	Grants interim approval of Riverside APCD's agricultural burning implementation plan, pending an opinion from Attorney General.
Resolution 71-93	---
Resolution 71-94	Provides for public hearings to adopt suitable agricultural burning plans for Amador, Calaveras, San Joaquin and Santa Barbara APCDs.
Resolution 71-95	Approves Marvel-Schebler emission control system under Section 39080, Section 26 of Health and Safety Code.
Resolution 71-96	Grants limited time extensions for dumps listed in attached tables.
Resolution 71-96A	Grants limited time extensions for dumps listed in attached table.
Resolution 71-96B	Denies time extension for Orange Cove dump site; grants 60-day extension to Meadow Lake dump site.
Resolution 71-96C	---
Resolution 71-96D	Grants limited time extension for dumps listed in attached table.
Resolution 71-96E	Grants transfer of limited time extension from abandoned to new Lost Hills dump site.
Resolution 71-96F	Rescinds prior approval and denies time extension to City of Willits for open burning in waste disposal site.
Resolution 71-97	Approves Audi 1972 models under 6,000 pounds.
Resolution 71-98	Approves Jaguar Cars, Ltd., 1972 models under 6,000 pounds.
Resolution 71-99	Approves Beam Products Mfg. Company carburetor utilizing LPG under section 39080 of Health and Safety Code.
Resolution 71-99A	Finds that Beam Products Mfg. Company carburetor for LPG will meet emission requirements of Section 8657 of the Revenue and Taxation code.
Resolution 71-99B	Approves Beam Products Mfg. Company carburetor utilizing LPG.
Resolution 71-99C	Finds that Beam Products Mfg. Company carburetor model utilizing LPG meets emission requirements of Section 8657 of Revenue and Taxation Code.

Resol. [REDACTED] Approves Isuzu Motors Limited 1972 models under 6,000 pounds.

Resolution 71-101 Finds that LPG and NG conversion systems described in Resolutions 70-9D, 70-16D, 70-34F, 70-68C, 71-29B and 71-99A meet emission requirements of Section 8657 of Revenue and Taxation Code.

Resolution 71-102 Approves Fiat S.p.A. 1972 models under 6,000 pounds.

Resolution 71-102A Approves Fiat S.p.A. 1972 models under 6,000 pounds.

Resolution 71-103 Adds Section 80140 to Agricultural Burning Guidelines; clarifies provisions for range and forest burning.

Resolution 71-103A Confirms addition of Section 80140 to Title 17 of California Administrative Code.

Resolution 71-104 Notes intent to amend assembly-line test regulations for 100% testing for 1973 models.

Resolution 71-104A Emergency regulations adopted on assembly-line test procedures.

Resolution 71-104B Confirms additions and amendments of Resolution 71-104A

Resolution 71-104C Interprets assembly-line test procedures to permit commencing January 31, 1973, more than 25% testing by 7-mode cycle.

Resolution <sup>71-104D</sup> 71-105 Amends Assembly Line tests for 1973 vehicles. Approves Bendix (Zenith) exhaust control system for internal combustion engines used in forklifts and similar equipment.

Resolution 71-106 Approves Proposal 4G-193-7 (submitted by Metronica Associates) subject to revision by ARB staff.

Resolution 71-107 Approves Proposal 5D-207-7 (submitted by Systems, Science and Software Company) subject to approval of ARB meteorological staff.

Resolution 71-108 Approves Proposal 4B-184-7 (submitted by the University of California at Davis).

Resolution 71-109 Approves Proposal 2-182-5, Revised, (submitted by Clean Air Research Company).

Resolution 71-110 Adopts Title 13, Chapter 3, Administrative Code, Subsection (f) of Section 2208 on test procedures for oxides of nitrogen.

Resolution 71-111 Amador and Santa Barbara APCD's agricultural burning implementation plans to be approved when satisfactory burning permit submitted.

Resolution 71-112 ---

Resolution 71-113 Surveillance of Assembly-Line Testing: adds Article 2, Subchapter 3, Chapter 3, Title 13 to California Administrative Code.

Resolution 71-114 Implementation of Federal public employment program (Emergency Employment Act of 1971)

Resolution 71-115 Approves Pneumetrics carburetor model of NG and gasoline (dual fuel).

Resolution 71-115A Finds Pneumetrics carburetor for NG and gasoline (dual fuel) meets Section 8657 of Revenue and Taxation Code.

Resolution 71-116 Invokes Section 39054 of Health and Safety Code. Requests response from San Bernardino APCD within 90 days.

Resolution 71-117 Policy on use of new fuel injectors in existing and new buses in public transportation system.

Resolution 71-118 Approves Proposal 3C-235-7 (submitted by Lockheed Palo Alto Research Laboratory).

Resolution 71-119 Combustion Control Incorporated granted two permits for testing pollution control device.

Resolution 71-120 Approves Checker Motors Corporation emission control system for 1972 models under 6,000 pounds.

Resolution 71-121 Chevron Research Company granted permit for testing pollution control device.

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State of California

AIR RESOURCES BOARD

Resolution 71-1

January 28, 1971

WHEREAS, White Motor Corporation submitted an application and all test data for 1971 California approval of exhaust emission control systems for vehicles greater than 6,000 pounds gross vehicle weight; and

WHEREAS, the applicant's three exhaust emission control systems are described as follows:

1. Engine-modification type system with major elements for the 331, 400, and 468 cubic inch engines:
  - (1) leaner carburetion plus idle rich limiter,
  - (2) third main jet adjusted and sealed at factory,
  - (3) distributor modification with calibration curve developed for emission control,
  - (4) recommended maintenance.
2. An engine-modification type system called "C.C.S." with major elements for the 350, 366, 401 and 478 cubic inch engine:
  - (1) leaner carburetion plus idle rich limiter,
  - (2) retarded spark at idle,
  - (3) recommended maintenance.

WHEREAS, the Board finds that the systems complies with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Article 2;

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, Division 26 of the Health and Safety Code,

Issue a resolution of approval to White Motor Company with respect to 1971-model vehicles greater than 6,000 pounds gross vehicle weight, with engines of the following sizes (cubic inches): 331, 350, 366, 400, 401, 468, 478.

State of California

AIR RESOURCES BOARD

Resolution 71-2

February 17, 1971

WHEREAS, The State of California 1970 Legislative Session amended Section 27156 of the Vehicle Code; and

WHEREAS, Section 39051 (c) of the Health and Safety Code authorizes the Air Resources Board to adopt Rules and Regulations in accordance with the provisions of the Administrative Procedure Act; and

WHEREAS, a criteria is needed for determining compliance with Section 27156 of the Vehicle Code when motor vehicle pollution control devices are altered or modified;

NOW, THEREFORE, BE IT RESOLVED, That the Air Resources Board hereby adopts a criteria entitled "Air Resources Board Criteria for Determining Compliance with Section 27156 of the Vehicle Code," dated February 17, 1971.

State of California

Air Resources Board Criteria for

Determining Compliance with Section 27156 of the Vehicle Code

The Air Resources Board, in order to implement the provisions of Section 27156 of the Vehicle Code and to determine compliance with it, adopts the following criteria for any device, apparatus or mechanism intended for use with, or as part of, any required motor vehicle pollution control device or system which alters or modified the original design or performance of any such motor vehicle pollution control system or device.

A modification or alteration of a motor vehicle pollution control may be permitted if the Board finds that the device does not reduce the effectiveness of any required motor vehicle pollution control device or that the emissions from such modification or alteration of a vehicle are at levels which comply with existing State or Federal regulations for that model year of the vehicle being modified or converted.

I. General Provisions

- A. The Air Resources Board's evaluation of such device, apparatus or mechanism will be concerned with emission levels due to the modification or alteration. The Board will not evaluate the performance and driveability of the vehicle nor the durability of the alteration or modification nor endorse any beneficial claims of the applicant. Replacement parts are not included in this criteria.
- B. All tests to determine compliance with Section 27156 shall be conducted in accordance with Air Resources Board Test Procedures for Exhaust Emissions, Fuel Evaporation Emissions and/or Crankcase Emissions Control for the proper model years.

II. Request for a Board Finding

- A. The manufacturer may apply to the Board for a finding that his proposed alteration, modification, or modifying device, apparatus, or mechanism complies with the requirements of Section 27156 of the California Vehicle Code. Upon application by the manufacturer to the Board for a resolution of compliance with Section 27156, the Executive Officer will make an engineering evaluation of the system or specify the number and type of tests to be performed by the applicant to demonstrate that such alteration or modification will not reduce the effectiveness or result in increased emission levels of any required motor vehicle emission control device.
- B. The written application to the Air Resources Board shall be signed by an authorized representative of the manufacturer and shall include the following:
  1. Detailed description of the device, apparatus or mechanism.
  2. Purpose of the device, apparatus or mechanism.
  3. Detailed instructions for installation on a vehicle.

II. Request for a Board Finding - Cont'd.

B. Cont'd.

4. Applicable emission test data taken in accordance with the appropriate Air Resources Board test procedures.
5. A listing of the makes and models of vehicles and emission control systems for which a Board finding is requested.
6. An agreement by the manufacturer that he will deliver to the Board, upon the request of the Executive Officer, any such device, apparatus or mechanism for independent evaluation.

III. Board Action

The Air Resources Board staff will review and evaluate the data submitted by the applicant as well as any test results from independent evaluation. If the engineering evaluation and/or test data indicate compliance with Section 27156 of the Vehicle Code, the Air Resources Board will adopt a resolution stating that they find that the device, apparatus, or mechanism complies with the requirements of Section 27156 of the Vehicle Code.

February 17, 1971



State of California  
Air Resources Board

Resolution 71-3

January 20, 1971

Whereas, Section 39051.1 of the Health and Safety Code authorizes the State Air Resources Board to establish, under specified conditions, maximum standards for volatility of gasoline sold in California; and

Whereas, Section 39051.2 of the Health and Safety Code authorizes the State Air Resources Board to establish by regulation maximum standards for the degree of unsaturation for gasoline sold in the South Coast Air Basin at Bromine Number 30;

Whereas, a public hearing and other proceedings have been held in accordance with the provisions of the Administrative Procedures Act, Title 2, Government Code;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board hereby adopts its regulations, Title 13, California Administrative Code, as follows:

1. Adopts new Subchapter 1, Article 2, Standards for Motor Vehicles Fuels, Section 1990 and 1991 to read:

Article 2, Standards for Motor Vehicle Fuels,

Section 1990, Degree of Unsaturation for Gasolines

a. No person shall after April 1, 1971, sell or supply within the South Coast Basin as a fuel for motor vehicles as defined by the Vehicle Code of the State of California, a gasoline having a degree of unsaturation greater than that indicated by a Bromine Number of 30 as determined by ASTM Method D1159-66.

b. For the purpose of this rule, the term "gasoline" means any petroleum distillate having a Reid Vapor Pressure of more than four pounds as defined by ASTM Method D323-58.

Section 1991, Reid Vapor Pressure for Gasolines

No person shall sell or supply as a fuel for motor vehicles as defined by the Vehicle Code of the State of California a gasoline having a Reid Vapor Pressure greater than nine pounds per square inch as determined by ASTM Method D323-58 beginning in 1971 in the following air basins established by the State Air Resources Board.

- a. April 1 through October 31: South Coast Basin  
Southeast Desert Basin
- b. May 1 through September 30: Great Basin Valleys Basin
- c. May 1 through October 31: San Francisco Bay Area Basin  
San Diego Basin  
Sacramento Valley Basin  
San Joaquin Valley Basin
- d. June 1 through September 30: North Coast Basin  
Northeast Plateau Basin
- e. June 1 through October 31: North Central Coast  
South Central Coast

This section shall not be applicable to gasoline delivered to retail outlets more than 14 days immediately preceding the periods set forth for each basin herein.

State of California

AIR RESOURCES BOARD

Staff Report

Exhaust Emission Control System

(Forklifts)

Allis-Chalmers

Allis-Chalmers has submitted an application containing all the test data for new engines required by the California Exhaust Emission Test Procedure for Portable and Mobile Internal Combustion Engines (Forklifts) Used Inside Buildings.

The applicant's exhaust emission control system is a gasoline engine-modification system.

Emission Data of Each Test Engine  
Projected to 1,500

<u>Engine No.</u>	<u>Engine Size</u> <u>Cubic Inches</u>	<u>Engine</u> <u>Class</u>	<u>Carburetor</u> <u>Make</u>	<u>Part No.</u>	<u>Emissions</u> <u>CO %</u>
S/NG-45727	153	B	Zenith	4516566	0.5
S/NG-54729	153	B	Zenith	4516566	0.5
S/NG-54724	230	C	Zenith	4516665	0.5
S/NG-60590	230	C	Zenith	4516665	0.6

Each test engine in the approval fleet met the emission standard of 1.5% CO.

Based on the test data and other information submitted by the applicant, the staff finds that the Allis-Chalmers exhaust emission control system meets the California requirements. The staff, therefore, recommends adoption of Resolution 71-4.

June 16, 1971

State of California

AIR RESOURCES BOARD

June 16, 1971

Resolution 71-4

WHEREAS, Allis Chalmers submitted an application and all test data for California certification of an exhaust emission control system for portable and mobile internal combustion engines (forklifts) used inside buildings; and

WHEREAS, the applicant's exhaust control system is described as a gasoline engine-modification type system with major elements:

- (1) leaner carburetor,
- (2) redesigned intake manifold,
- (3) recommended maintenance.

WHEREAS, the Board finds that the systems comply with the California Administrative Code, Title 13, Chapter 3, Sub-Chapter 1 and Sub-Chapter 2, Article 5;

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, Division 26 of the Health and Safety Code,

Issue a resolution of approval to Allis-Chalmers with respect to its exhaust emission control system for new portable and mobile internal combustion engines of the following engine sizes:

<u>Engine Size Class</u>	<u>Engine Size Displacement</u>
B	140-200 cubic inches
C	200-250 cubic inches

State of California

AIR RESOURCES BOARD

Resolution 71-5

January 20, 1971

WHEREAS, Ethyl Corporation, 1141 Huntly Drive, Los Angeles, California has applied for a permit for the testing of an experimental motor vehicle pollution control device for approval by this Board; and

WHEREAS, the device comprises an exhaust gas thermal reactor, leaner carburetion, exhaust gas recycle and a particulate matter trap; and

WHEREAS, Section 39181 of the Health and Safety Code, authorizes the Board to issue such permits;

NOW, THEREFORE, BE IT RESOLVED, That Ethyl Corporation is hereby granted a permit for testing an experimental control device for a period of one year from this date.

State of California

AIR RESOURCES BOARD

Resolution 71-6-A

February 17, 1971

WHEREAS, the Air Resources Board finds it necessary to revise the "California Exhaust Emission Standards and Test Procedures for 1972-Model Gasoline-Powered Motor Vehicles Under 6,001 Pounds Gross Vehicle Weight" adopted December 15, 1970; and

WHEREAS, Section 39052(k) of the Health and Safety Code authorized the Air Resources Board to revise its test procedures for emissions from new motor vehicles;

NOW, THEREFORE, BE IT RESOLVED, That the Air Resources Board hereby amends into the "California Exhaust Emission Standards and Test Procedures for 1972-Model Gasoline-Powered Motor Vehicles Under 6,001 Pounds Gross Vehicle Weight" by the following revisions, additions and deletions:

Amend the Air Resources Board Policy for the Submission of an Application for Approval of 1972-Model Year Vehicles Under 6,001 Pounds Gross Vehicle Weight as follows:

Revise the first sentence of second paragraph to read:

A vehicle manufacturer upon written permission from the Executive Officer may be granted has the option of determining compliance ~~for~~ with 1972-model year emission standards by an essentially equivalent test procedure, entitled "optional procedure."

Revise the third paragraph to read:

If the vehicle manufacturer conducts his testing program under this "optional procedure," he will also be required to show compliance with a California Exhaust Emission Standard for oxides of nitrogen of 3.2 grams per vehicle mile based on ~~four~~ two hot seven-mode cycles, as specified in the seven-mode test procedure.

Amend the Seven-Mode Test Procedure as follows:

Revise paragraph I.A.(4) to read:

"Light-duty vehicle" means a any motor vehicle either designed primarily for transportation of property and rated at under 6,000 pounds gross vehicle weight or less or designed primarily for transportation of persons on property on a street or highway and having a capacity of 12 persons or less.

February 17, 1971

Revise paragraph I.a.(10) to read:

"Limited production vehicle" means a make of motor vehicle built by a manufacturer who produces of a model year prior to 1973 which was manufactured or sold in California in quantities of less than 2000 motor vehicles per year units for such model year if the sales of the make of motor vehicle in California did not exceed 200 units in the 1968 calendar year.

Revise paragraph II.B. to read:

B. Standards for exhaust emissions.

Exhaust emissions from new light-duty motor vehicles and new motor vehicle engines shall not exceed:

~~(1)~~ 1971 model year

Hydrocarbons--2.2 grams per vehicle mile

Carbon monoxide--23 grams per vehicle mile

Oxides of nitrogen--4.0 grams per vehicle mile as NO<sub>2</sub>

(1) ~~(2)~~ 1972 and 1973 model years year

Hydrocarbons--1.5 grams per vehicle mile,

Carbon monoxide--23 grams per vehicle mile,

Oxides of nitrogen--3.0 grams per vehicle mile as NO<sub>2</sub>.

~~(3)~~ 1974 and subsequent model years

Hydrocarbons--1.5 grams per vehicle mile

Carbon monoxide--23 grams per vehicle mile

Oxides of nitrogen--1.3 grams per vehicle mile as NO<sub>2</sub>

February 17, 1971

These standards refer to a composite sample representing the driving cycles set forth in this Test Procedure and measured in accordance with those procedures.

Amend the Optional Test Procedure as follows:

Revise paragraph IV., A., 3. to read:

The exhaust emissions test to determine oxides of nitrogen mass emissions shall consist of sampling the exhaust gas from two (2) hot cycles run in accordance with the seven-mode test procedure. The test for oxides of nitrogen shall be run immediately after the test called for in IV., A., 2. Carbon monoxide and hydrocarbon values shall also be reported for the seven-mode test.

If the manufacturer is required to run an evaporative emissions test in accordance with the Federal test procedure (Section 85.74 c) the exhaust emission test for oxides of nitrogen shall be run immediately after the one hour hot soak test for evaporative emissions. In this case three hot seven-mode cycles shall be driven with emission results determined from the latter two cycles.

Add paragraph I., A., 20.

"Limited production vehicle" means a make of motor vehicle of a model year prior to 1973 which was manufactured or sold in California in quantities of less than 2000 units for such model year if the sales of the make of motor vehicle in California did not exceed 200 units in the 1968 calendar year.

Revise paragraph II., A., 3. to read:

limited production vehicles, as defined in Section 39090 in the California Health and Safety Code

Revise paragraph R.3.a. to read:

- a. Separate emission deterioration factors shall be determined from the emission results of the durability data vehicles for each engine-system combination. A separate factor shall be established for the combination for exhaust HC, and exhaust CO, and exhaust NO.



Revise Optional Test Procedure index page i as follows:

I. GENERAL PROVISIONS

E. Special Test Procedure Production Vehicles and Engines.

F. Special Test Procedures

Renumerate Section I., E. to Section I., F.

Add new Section I., E. to read:

E. Production vehicles and engines.

1. Any manufacturer obtaining approval under this part shall supply to the Executive Officer, upon his request, a reasonable number of production vehicles or engines selected by the Executive Officer which are representative of the engines, emission control systems, fuel systems, and transmissions offered and typical of production models available for sale under the approval. These vehicles or engines shall be supplied for testing at such time and place and for such reasonable periods as the Executive Officer may require. Engines supplied under this paragraph, may be required to be mounted in chassis and appropriately equipped for operation on a chassis dynamometer.
2. Any manufacturer obtaining approval under this part shall notify the Executive Officer, on a quarterly basis, of the number of vehicles of each engine family - engine displacement - exhaust emission control system-fuel system transmission type-inertia weight class combination or the number of engines of each engine family-engine displacement-exhaust emission control system-fuel system combination produced for sale in California during the preceding quarter. A manufacturer may elect to provide this information every 60 days instead of quarterly, to combine it with the notification required under I.D.
3. All light-duty vehicles covered by a resolution of approval shall be adjusted by the manufacturer to the ignition timing specifications shown on their permanent label for California requirements.

Delete subparagraphs III., A., 2., m., 4., (a), (b), (c).

State of California

AIR RESOURCES BOARD

Resolution 71-6-B

February 17, 1971

WHEREAS, Section 39052(k) of the Health and Safety Code authorized the Air Resources Board to revise its test procedure for emissions from new motor vehicles; and

WHEREAS, The Air Resources Board adopted Resolution 71-6-A which made revisions to the "California Exhaust Emission Standards and Test Procedures for 1972-Model Gasoline-Powered Motor Vehicles under 6,001 Pounds Gross Vehicle Weight" adopted December 15, 1970;

NOW, THEREFORE, BE IT RESOLVED, That the Air Resources Board hereby repeals, amends and adopts its regulations, Title 13, Chapter 3, Subchapter 2, California Administrative Code, as follows:

1. Amends Subchapter 2, Article 2, Section 2109(h) to read:  
(h) The test procedures for determining compliance with Exhaust Emission Standards specified in Sections 39101.5, 39102 and 39102.5 of the Health and Safety Code and Section 1944, Title 13, California Administrative Code are those set forth in "California Exhaust Emission Standards and test procedures for 1972-Model Gasoline-Powered Motor Vehicles under 6,001 lbs. G.V.W.," adopted by the Air Resources Board December 15, 1970, amended February 17, 1971.
2. Amends Subchapter 2, Article 3, Section 2208(d) to read:  
(d) The test procedures for determining compliance with Exhaust Emission Standards specified in Sections 39101.5, 39102 and 39102.5 of the Health and Safety Code and Section 1944, Title 13, California Administrative Code are those set forth in "California Exhaust Emission Standards and test procedures for 1972-Model Gasoline-Powered Motor Vehicles under 6,001 lbs. G.V.W." adopted by the Air Resources Board on December 15, 1970, amended February 17, 1971.

FINDING OF EMERGENCY

The State Air Resources Board finds that an emergency exists and that the foregoing regulations are necessary for the immediate preservation of the public peace, health and safety or general welfare. A statement of the facts constituting such emergency is:

Resolution 71-6-B

February 17, 1971

FINDING OF EMERGENCY - Cont'd.

Proceedings for waiver of Federal pre-emption of motor vehicle air pollution control pursuant to section 209(b) of the Federal Clean Air Act will terminate February 22, 1971. In order that the State of California may show that its standards and test procedures are technologically feasible, and thus obtain such waiver, it is necessary that the above changes be made to existing test procedures clarifying such procedures, eliminating unnecessary duplication with Federal test procedures, and bringing California test procedures into greater conformity with Federal ones.

The said regulations are therefore adopted as emergency regulations, to take effect immediately upon filing with the Secretary of State as provided in Section 11422(c) of the Government Code.

AIR RESOURCES BOARD

State of California

RESOLUTION 71-6-C

WHEREAS, the State Air Resources Board on December 15, 1970 adopted and on February 17, 1971 amended Sections 2109(h) and 2208(d) of Title 13, California Administrative Code, setting forth exhaust emission standards and test procedures for 1972 model-year gasoline-powered motor vehicles under 6,001 pounds G.V.W; and

WHEREAS, Sections 2109(h) and 2208(d) were adopted and amended as emergency regulations as provided for in Section 11421(b) of the Government Code;

NOW THEREFORE BE IT RESOLVED, That after public hearings held pursuant to Section 11422.1(a) of the Government Code, the State Air Resources Board hereby reaffirms the actions taken on December 15, 1970 adopting Sections 2109(h) and 2208(b), Title 13, California Administrative Code, and on February 17, 1971 amending said Sections.

State of California

AIR RESOURCES BOARD

Resolution 71-7-A

February 17, 1971

WHEREAS, the Air Resources Board finds it necessary to revise the "California Exhaust Emission Standards, Test and Approval Procedures for Engines in 1973 and Subsequent Model Gasoline-Powered Motor Vehicles Over 6,001 Pounds Gross Vehicle Weight," adopted November 19, 1970; and

WHEREAS, Section 39052 (k) of the Health and Safety Code authorized the Air Resources Board to revise its test procedures for emissions from new motor vehicles;

NOW, THEREFORE, BE IT RESOLVED, That the Air Resources Board hereby amends into the "California Exhaust Emission Standards, Test and Approval Procedures for Engines in 1973 and Subsequent Model Gasoline-Powered Motor Vehicles Over 6,001 Pounds Gross Vehicle Weight" by the following revisions, additions and deletions:

Revise title to read:

California Exhaust Emission Standards, Test and Approval Procedures for 1973 and Subsequent Model Year Engines in 1973 and Subsequent Model Year Gasoline-Powered Motor Vehicles Over 6,001 Pounds Gross Vehicle Weight.

Revise paragraph I., A., 2. to read:

"Engine Model Year" means the time of manufacture, production period of new motor vehicle engines either (1) within the annual production period of such vehicles as designated by the calendar year in which such period ends: Provided, That if the manufacturer does not so designate the annual production period of the model year with respect to such vehicles engines manufactured by him within shall mean the 12-month period beginning November 1 January 1 of the preceding year in which production begins. In the case of any vehicle manufactured in two or more stages, the time of manufacture shall be the date of completion of the chassis.

Revise paragraph II., A. to read:

A. Applicability.

The provisions are applicable to 1973 and subsequent engine model year gasoline-powered engines for use in 1973 and subsequent model year heavy-duty vehicles.

Revise paragraph II., B., 1. to read:

1. Exhaust emissions from 1973 and 1974 engine model-year gasoline-powered engines for use in 1973 and 1974 model year heavy-duty motor vehicles and new heavy-duty motor vehicle engines shall not exceed:

- a. Hydrocarbons plus oxides of nitrogen (as NO<sub>2</sub>) - 16 gm/BHP-hr.
- b. Carbon Monoxide - 40 gm/BHP-hr.

Revise paragraph II., B., 2. to read:

- 2. Exhaust emissions from 1975 or later engine model-year gasoline-powered engines for use in 1975 or later model year heavy-duty motor vehicles and new heavy-duty motor vehicle engines shall not exceed:
  - a. Hydrocarbons plus oxides of nitrogen (as NO<sub>2</sub>) - 5 gm/BHP-hr.
  - b. Carbon Monoxide - 25 gm/BHP-hr.

Add paragraph III., C., i. as shown:

- i. A statement that the engines for which approval is requested have been designed to operate with 91 Research Octane Number fuel and that no adverse driveability effects (i.e., pre-detonation) will result from the use of such fu

Amend conversion factor "K" equations in paragraph IV., K. to read:

$$K = 0.796 + 0.00175H + 0.00001294H^2$$

$$K = 0.634 + 0.00654H - 0.0000222H^2$$

$$K = 0.796 + 0.00175(61) + 0.00129(61)^2 = 0.961$$

$$K = 0.634 + 0.00654(61) - 0.00222(61)^2 = 0.950$$

Delete Subsections IV., L.; IV., M.; IV., N.; and IV., O.

Add new Subsections IV., L.; IV., M.; IV., N.; and IV., O to read:

#### L. Test engines.

- 1. The engines covered by the application for approval will be divided into groups which are expected to have similar emission characteristics. Each group of engines with similar emission characteristics shall be defined as a separate engine family.
  - a. To be classed in the same engine family, engines must be identical in all the following respects:
    - 1. The cylinder bore center to center dimensions.
    - 2. The dimensions from the centerline of the crankshaft to the centerline of the camshaft.
    - 3. The dimension from the centerline of the crankshaft to the top of the cylinder block head face.
    - 4. The cylinder block configuration (air-cooled or water-cooled; L-6, 90°, V-8, etc.)
    - 5. The location of intake and exhaust valves and the valve sizes (within a 1/8-inch range on the valve head diameter).
    - 6. The method of air aspiration.
    - 7. The combustion cycle.

- b. Engines identical in all the respects listed in subparagraph a. of this paragraph may be further divided into different engine families if the Executive Officer determines that they may be expected to have different emission characteristics. This determination will be based upon a consideration of the following features of each engine:
    1. The bore and stroke.
    2. The surface to volume ratio of the nominally dimensioned cylinder at the top dead center position.
    3. The intake manifold induction port size and configuration.
    4. The exhaust manifold port size and configuration.
    5. The intake and exhaust valve sizes.
    6. The fuel system.
    7. The camshaft timing and ignition timing characteristics.
  - c. Where engines are of a type which cannot be divided into engine families based upon the criteria listed in subparagraph a. and b. of this paragraph, the Executive Officer will establish families for those engines based upon the features most related to their emission characteristics.
2. Emission data engines:
- a. Engines will be chosen to be run for emission data based upon the engine family groupings. Within each engine family, the requirements of this paragraph must be met.
  - b. Engines of each engine family will be divided into engine displacement-exhaust emission control system combinations. A projected sales volume will be established for each combination for the model year for which approval is sought. One engine of each combination will be selected in order of decreasing projected sales volume until 70 percent of the projected sales of a manufacturer's total production of engines of that family is represented, or until a maximum of four engines is selected. The engines selected for each combination will be specified by the Executive Officer as to fuel system.
  - c. The Executive Officer may select a maximum of two additional engines within each engine family based upon features indicating that they may have the highest emission levels of the engines in that engine family. In selecting these engines, the Executive Officer will consider such features as the exhaust emission control system, induction system characteristics, ignition system characteristics, fuel system, rated horsepower, rated torque, and compression ratio.
  - d. If the engines selected in accordance with subparagraphs b. and c. of this paragraph do not represent each engine-system combination, then one engine of each engine-system combination not represented shall be selected by the Executive Officer. The engine selected shall be of the displacement with the largest projected sales volume

of engines with the exhaust emission control system in the family and will be designated by the Executive Officer as to fuel system.

3. Durability data engines:

- a. A durability data engine will be selected by the Executive Officer to represent each engine-system combination. The engine selected shall be of the displacement with the largest projected sales volume of engines with that exhaust emission control system in that engine family and will be designated by the Executive Officer as to fuel system.
  - b. If an exhaust emission control system is used in only one engine family, an additional engine using that control system in that family will be selected so that the durability data fleet shall contain at least two engines with each control system. The additional engine will be selected in the same manner as engines selected under subparagraph a. of this paragraph.
  - c. A manufacturer may elect to operate and test additional engines to represent any engine-system combination. The additional engines must be of the same engine displacement and fuel system as the engine selected for that combination in accordance with the provisions of subparagraph a. of this paragraph. Notice of an intent to run additional engines shall be given to the Executive Officer not later than 30 days following notification of the test fleet selection.
4. Any manufacturer whose projected sales of new motor vehicle engines subject to this subpart for the model year for which approval is sought is less than 700 engines may request a reduction in the number of test engines determined in accordance with the foregoing provisions of this section. The Executive Officer may agree to such lesser number as he determines will meet the objectives of this procedure.
5. In lieu of testing an emission data or durability data vehicle selected under paragraph 2. or 3. of this section and submitting data therefore, a manufacturer may, with the prior written approval of the Executive Officer, submit data on a similar vehicle for which approval has previously been obtained.

M. Maintenance.

1. a. Maintenance on the engines and fuel systems of durability engines may be performed only under the following provisions:
  - (1) Two major engine tuneups to manufacturer's specifications may be performed at 500 and 1,000 hours (+8 hours) of scheduled dynamometer operation with the following exception: On engines with a displacement of 200 cubic inches or less, a major engine tuneup may be performed at 375, 750, and 1,125 hours (+8 hours) of scheduled dynamometer operation. A major engine tuneup shall be restricted to the following:
    - (a) Replace spark plugs.
    - (b) Inspect ignition wiring and replace as required.



- (c) Replace distributor breaker points and condenser as required.
  - (d) Lubricate distributor cam.
  - (e) Check distributor advance and breaker point dwell angle and adjust as required.
  - (f) Check automatic choke for free operation and correct as required.
  - (g) Adjust carburetor idle speed and mixture.
  - (h) Adjust drive belt tension on engine accessories.
  - (i) Adjust valve lash if required.
  - (j) Check exhaust heat control valve for free operation.
  - (k) Check engine bolt torque and tighten as required.
- (2) Spark plugs may be changed if a persistent misfire is detected.
  - (3) Normal services (engine oil change, and oil filter, fuel filter and air filter servicing) will be allowed at manufacturer's recommended intervals.
  - (4) The crankcase emission control system may be serviced at 375-hour intervals (+8 hours) of dynamometer operation.
  - (5) Readjustment of the engine choke mechanism or idle settings may be performed only if there is a problem of stalling at idle.
  - (6) Leaks in the fuel system, engine lubrication system and cooling system may be repaired.
  - (7) Any other engine or fuel system maintenance or repairs will be allowed only with the advance approval of the Executive Officer.
- b. Allowable maintenance on emission data engines shall be limited to the adjustment of engine idle speed at the 125-hour test point.
- 2. Complete emission tests (see para. IV.B. through IV.K.) shall be run before and after any engine maintenance which may reasonably be expected to affect emissions. These test data shall be supplied to the Executive Officer immediately after the tests, along with a complete record of all pertinent maintenance, including an engineering report of any malfunction diagnosis and the corrective action taken. In addition, all test data and maintenance reports shall be compiled and provided to the Executive Officer in accordance with para. III.C.
  - 3. If the Executive Officer determines that maintenance or repairs have resulted in a substantial change to the engine-system combination, the engine shall not be used as a durability data engine.

#### II. Durability testing and emission measurements.

The engine dynamometer service accumulation schedule will consist of several operating conditions which give the same percentage of time at various manifold vacuums and the modes as specified in the emission test cycle. The average speed shall be between 1,650 and 1,700 r.p.m. with some operation at 3,200 r.p.m. or governed speed, whichever is lower. Maximum cycle time shall be 15 minutes. A cycle approved in advance by the Executive Officer shall be used.

1. Emission data engines: Each emission data engine shall be operated for 125 hours with all emission control systems installed and operating. Emission tests shall be conducted at zero and 125 hours.
  2. Durability data engines: Each durability data engine shall be operated, with all emission control systems installed and operating, for 1,500 hours. Emission measurements, as prescribed, shall be made at zero hours and at each 125-hour interval.
  3. All tests required by this subpart to be conducted after 125 hours of operation or at any multiple of 125 hours may be conducted at any accumulated number of hours within 8 hours of 125 hours or the appropriate multiple of 125 hours, respectively.
  4. The results of each emission test shall be supplied to the Executive Officer immediately after the test. In addition, all test data shall be compiled and provided to the Executive Officer in accordance with para. III.C.
  5. Whenever the manufacturer proposed to operate and test an engine which may be used for emission or durability data, he shall provide the zero-hour test data to the Executive Officer and make the engine available for such testing under para. III.C. as the Executive Officer may require, before beginning to accumulate hours on the engine. Failure to comply with this requirement will invalidate all test data later submitted for this engine.
  6. Once a manufacturer begins to operate an emission data or durability data engine, as indicated by compliance with paragraph 5. of this section, he shall continue to run the engine to 125 hours or 1,500 hours, respectively, and the data from the engine will be used in the calculations under para. IV.O. Discontinuation of an engine shall be allowed only with the prior written consent of the Executive Officer.
0. Compliance with emission standards.
1. The exhaust emission standards in the regulations in this part apply to the average lifetime emissions of engines in public use. Prior to approval lifetime emissions can be obtained by projection of test data to lifetime normal service. Normal service in an urban area or its equivalent for 100,000 miles is taken as the basis for "lifetime emissions." Operation on an engine dynamometer in the prescribed manner for 3,000 hours is taken to be equivalent to such service.
  2. It is expected that emission control efficiency will change with the accumulation of hours on the engine. It is assumed that the emission level of an engine which has accumulated 1,500 hours of dynamometer operation is the average emission level of that engine over its lifetime.
  3. The procedure for determining compliance of a new engine with exhaust emission standards is as follows:
    - a. Separate emission deterioration factors shall be determined from the emission results of the durability data engines for each engine-system combination. Separate factors shall be established for HC, CO, and NO for each combination.

(1) The applicable results to be used in determining deterioration factors for each combination shall be:

(a) All emission data from the tests required under para. IV., N., 2., except the zero-hour tests. This shall include the official test results, as determined in para. III., C., for all tests conducted on all durability engines of the combination selected under para. IV., L., 3. (including all engines elected to be operated by the manufacturer under para. IV., L., 3., c.

(b) All emission data from the tests conducted before and after the maintenance provided in para. IV., II., 1., a., (1).

(2) All applicable results shall be plotted as a function of the hours on the system, rounded to the nearest hour, and the best fit straight lines, fitted by the method of least squares, shall be drawn through these data points. The interpolated 125- and 1,500-hour points on this line must be within the standard provided in para. II., B. or the data shall not be used in calculation of a deterioration factor.

(3) An exhaust emission deterioration factor shall be calculated for each combination as follows:

$$\text{factor} = \frac{\text{exhaust emissions interpolated to 1,500 hours}}{\text{exhaust emissions interpolated to 125 hours}}$$

b. The exhaust emission test results for each emission data engine shall be multiplied by the appropriate deterioration factor: Provided, That if a deterioration factor as computed in subparagraph (a) of this paragraph is less than one, that deterioration factor shall be one for the purposes of this subparagraph.

c. The emissions to compare with the standard shall be the adjusted emissions of subparagraph (b) of this paragraph for each emission data engine.

d. Every test engine of an engine family must comply with all applicable standards, as determined in subparagraph (c) of this paragraph, before any engine in that family will be approved.

Amend paragraph IV. K. 4. add Record negative values as zero.

State of California

AIR RESOURCES BOARD

Resolution 71-7-B

February 17, 1971

WHEREAS, Section 39052(k) of the Health and Safety Code authorized the Air Resources Board to revise its test procedure for emissions from new motor vehicles; and

WHEREAS, The Air Resources Board adopted Resolution 71-7-A which made revisions to the "California Exhaust Emission Standards, Test and Approval Procedures for Engines in 1973 and Subsequent Model Gasoline-Powered Motor Vehicles Over 6,001 Pounds Gross Vehicle Weight," adopted November 19, 1970;

NOW, THEREFORE, BE IT RESOLVED, That the Air Resources Board hereby repeals, amends and adopts its regulations, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, California Administrative Code, as follows:

1. Amends Subchapter 1, Article 1, Section 1943 to read:

1943. Exhaust Emissions (Over 6,001 lbs. G.V.W.). The State Air Resources Board finds compliance with the standards for exhaust emissions set forth below to be necessary and technologically feasible for 1973 and subsequent engine model-year gasoline-powered engines for use in heavy-duty motor vehicles over 6,001 lbs. G.V.W. In accordance with this finding, the standards for such vehicles are:

- (a) Exhaust emissions from 1973 and 1974 engine model-year gasoline-powered engines for use in 1973 and 1974 model year heavy-duty motor vehicles and new heavy-duty motor vehicle engines shall not exceed:
  - (1) Hydrocarbons plus oxides of nitrogen (as NO<sub>2</sub>)-16 grams per brake horsepower hour.
  - (2) Carbon Monoxide-40 grams per brake horsepower hour.
- (b) Exhaust emissions from 1975 or later engine model-year gasoline-powered engines for use in 1975 or later model-year heavy duty motor vehicles and new heavy-duty motor vehicle engines shall not exceed:
  - (1) Hydrocarbons plus oxides of nitrogen (as NO<sub>2</sub>)-5 grams per brake horsepower hour.
  - (2) Carbon Monoxide-25 grams per brake horsepower hour.

Resolution 71-7-B

February 17, 1971

2. Amends Subchapter 2, Article 2, Section 2109(g) to read:

2109. Test Procedures.

- (g) The test procedures for determining compliance with exhaust emission standards, specified in accordance with Sections 39052.5, 39052.6 and 39151 of the Health and Safety Code are:

California Exhaust Emission Standards, Test And Approval Procedures For 1973 And Subsequent Model-Year Engines In 1973 And Subsequent Model Gasoline-Powered Motor Vehicles Over 6,001 Pounds Gross Vehicle Weight dated ~~November 18, 1970~~ February 17, 1971.

3. Amends Subchapter 2, Article 3, Section 2208(c) to read:

2208. Test Procedures.

- (c) The test procedures for determining compliance with the exhaust emission standards specified in accordance with Sections 39052.5, 39052.6 and 39151 of the Health and Safety Code are:

California Exhaust Emission Standards, Test And Approval Procedures For 1973 And Subsequent Model Year Engines In 1973 And Subsequent Model Gasoline-Powered Motor Vehicles Over 6,001 Pounds Gross Vehicle Weight, dated ~~November 18, 1970~~ February 17, 1971.

FINDING OF EMERGENCY

The State Air Resources Board finds that an emergency exists and that the foregoing regulations are necessary for the immediate preservation of the public peace, health and safety or general welfare. A statement of the facts constituting such emergency is:

Proceedings for waiver of Federal pre-emption of motor vehicle air pollution control pursuant to section 209(b) of the Federal Clean Air Act will terminate February 22, 1971. In order that the State of California may show that its standards and test procedures are technologically feasible, and thus obtain such a waiver, it is necessary that the above changes be made to existing test procedures clarifying such procedures, eliminating unnecessary duplication with Federal test procedures, and bringing California test procedures into greater conformity with Federal ones.

AIR RESOURCES BOARD

State of California

RESOLUTION 71-7-C

WHEREAS, the State Air Resources Board on February 17, 1971, amended Sections 1943, 2109(g) and 2208(c) of Title 13, California Administrative Code, setting forth exhaust emission standards and test procedures for 1973 and subsequent model-year gasoline-powered engines in vehicles over 6,001 pounds G.V.W.; and

WHEREAS, Sections 1943, 2109(g) and 2208(c) were amended as emergency regulations as provided for in Section 11421(b) of the Government Code;

NOW THEREFORE BE IT RESOLVED, That after public hearings held pursuant to Section 11422.1(a) of the Government Code, the State Air Resources Board hereby reaffirms the action taken on February 17, 1971 amending Sections 1943, 2109(g) and 2208(c) of Title 13, California Administrative Code.

3-17-71

State of California

AIR RESOURCES BOARD

Resolution 71-8-A

February 17, 1971

WHEREAS, the Air Resources Board finds it necessary to revise the "California Exhaust Emission Standards, Test and Approval Procedures for Diesel Engines in 1973 and Subsequent Model Vehicles Over 6,001 Pounds Gross Vehicle Weight," adopted November 19, 1970; and

WHEREAS, Section 39052 (k) of the Health and Safety Code authorized the Air Resources Board to revise its test procedures for emissions from new motor vehicles;

NOW, THEREFORE, BE IT RESOLVED, That the Air Resources Board hereby amends into the "California Exhaust Emission Standards, Test and Approval Procedures For Diesel Engines in 1973 and Subsequent Model Vehicles Over 6,001 Pounds Vehicle Weight," by the following revisions, additions and deletions:

Revise paragraph I.,B.,1. to read:

"Heavy-duty vehicle" means a any motor vehicle either designed primarily for transportation of property on a street or highway and rated at more than 6,000 pounds gross vehicle weight or designed primarily for transportation of persons and having a capacity of more than 12 persons.

Delete entire paragraph I.,B.,11.

Add new paragraph I.,B.,11. to read:

"Engine model year" means the production period of new motor vehicle engines designated by the calendar year in which such period ends: Provided, That if the manufacturer does not designate a production period the model year with respect to such engines shall mean the 12-month period beginning January 1 of the year in which production begins.

Revise paragraph I.,D.,1.,and,2. to read:

1. Exhaust emissions from diesel engines used in new 1973 and 1974 model year vehicles heavy-duty vehicles manufactured after January 1, 1973 shall not exceed:
  - a. Hydrocarbons plus oxides of nitrogen (as NO<sub>2</sub>) - 16 gm/BHP-hr.
  - b. Carbon monoxide - 40 gm/BHP-hr.

State of California

AIR RESOURCES BOARD

Resolution 71-8-B

February 17, 1971

WHEREAS, Section 39052(k) of the Health and Safety Code authorized the Air Resources Board to revise its test procedure for emissions from new motor vehicles; and

WHEREAS, The Air Resources Board adopted Resolution 71-8-A which made revisions to the "California Exhaust Emission Standards, Test and Approval Procedures For Diesel Engines in 1973 and Subsequent Model Vehicles Over 6,001 Pounds Gross Vehicle Weight" adopted November 19, 1970;

NOW, THEREFORE, BE IT RESOLVED, That the Air Resources Board hereby repeals, amends and adopts its regulations, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, California Administrative Code, as follows:

1. Amends Subchapter 1, Article 1, Section 1942 to read:

1942. Exhaust Emissions (Over 6,001 lbs. G.V.W.). The State Air Resources Board finds compliance with the standards for exhaust emissions set forth below to be necessary and technologically feasible for 1973 and subsequent model year diesel-powered motor vehicles over 6,001 lbs. G.V.W. In accordance with this finding, the standards for such vehicles are:

- (a) Exhaust emissions from diesel engines in new 1973 and 1974 model year vehicles over 6,001 pounds gross vehicle weight used in heavy-duty vehicles manufactured after January 1, 1973, shall not exceed:
  - (1) Hydrocarbons plus oxides of nitrogen (as NO<sub>2</sub>)-16 grams per brake horsepower hour.
  - (2) Carbon monoxide-40 grams per brake horsepower hour.
- (b) Exhaust emissions from 1975 or later engine model-year diesel powered engines used for use in new 1975 and subsequent model year heavy-duty motor vehicles shall not exceed:



February 17, 1971

- (1) Hydrocarbons plus oxides of nitrogen (as NO<sub>2</sub>)--5 grams per brake horsepower hour.
  - (2) Carbon monoxide--25 grams per brake horsepower hour.
2. Amends Subchapter 2, Article 2, Section 2109(f) to read:
- 2109(f). The test procedures for determining compliance with exhaust emission standards, specified in accordance with Sections 39052(n) and 39109 of the Health and Safety Code are:
- "California Exhaust Emission Standards, Test and Approval Procedures for Diesel Engines in 1973 and Subsequent Model Year Vehicles Over 6,001 Pounds Gross Vehicle Weight" dated November 18, 1970, amended February 17, 1971.
3. Amends Subchapter 2, Article 3, Section 2208(b) to read:
- 2208(b). The test procedures for determining compliance with the exhaust emission standards specified in accordance with Sections 39052(n) and 39109 of the Health and Safety Code are: "California Exhaust Emission Standards, Test and Approval Procedures for Diesel Engines in 1973 and Subsequent Model Year Vehicles Over 6,001 Pound Gross Vehicle Weight" dated November 18, 1970, amended February 17, 1971.

#### FINDING OF EMERGENCY

The State Air Resources Board finds that an emergency exists and that the foregoing regulations are necessary for the immediate preservation of the public peace, health and safety or general welfare. A statement of the facts constituting such emergency is:

Proceedings for waiver of Federal pre-emption of motor vehicle air pollution control pursuant to section 209(b) of the Federal Clean Air Act will terminate February 22, 1971. In order that the State of California may show that its standards and test procedures are technologically feasible, and thus obtain such a waiver, it is necessary that the above changes be made to existing test procedures clarifying such procedures, eliminating unnecessary duplication with Federal test procedures, and bringing California test procedures into greater conformity with Federal ones.

The said regulations are therefore adopted as emergency regulations, to take effect immediately upon filing with the Secretary of State as provided in section 11422(c) of the Government Code.

AIR RESOURCES BOARD

State of California

RESOLUTION 71-8-C

WHEREAS, the State Air Resources Board on February 17, 1971, amended Sections 1942, 2109(f) and 2208(b) of Title 13, California Administrative Code, setting forth exhaust emission standards and test procedures for 1973 and subsequent model-year diesel-powered motor vehicles over 6,001 pounds G.V.W.; and

WHEREAS, Sections 1942, 2109(f) and 2208(b) were amended as emergency regulations as provided for in Section 11421(b) of the Government Code;

NOW THEREFORE BE IT RESOLVED, That after public hearings held pursuant to Section 11422.1(a) of the Government Code, the State Air Resources Board hereby reaffirms the action taken on February 17, 1971 amending Sections 1942, 2109(f) and 2208(b) of Title 13, California Administrative Code.

State of California

AIR RESOURCES BOARD

Resolution 71-9-A

February 17, 1971

WHEREAS, the Air Resources Board finds it necessary to revise the "California Assembly-Line Test Procedures" adopted September 16, 1970; and

WHEREAS, Section 39052(k) of the Health and Safety Code authorized the Air Resources Board to revise its test procedures for emissions from new motor vehicles;

NOW, THEREFORE, BE IT RESOLVED, That the Air Resources Board hereby amends into the "California Assembly-Line Test Procedures" the following addition:

Add the following after the first paragraph of the General Provisions to read:

Manufacturers of limited production vehicles are exempt from the provisions of these procedures. A limited production vehicle is currently defined in Section 39090 of the Health and Safety Code as a make of motor vehicle of a model year prior to 1973 which was manufactured or sold in California in quantities of less than 2,000 units for such model year if the sale of the make of motor vehicle in California did not exceed 200 units in the 1968 calendar year.

Amend Section 2 of the California Assembly-Line Test Procedures, adopted September 16, 1970, to read:

2. Test Procedure

The sampling and analytical procedure shall be that described in the Official California Exhaust Emission Test Procedure for the Model year in production, with the specific exceptions stated as follows:

- a) The evaporative emission control system may be disconnected during the test.
- b) The engine shall be adjusted to the manufacturer's specifications for delivery to customers.
- c) For the 1972 model year only the Quality Audit tests may be performed by the 7-Mode 7 Cycle Test Procedure or the optional Constant Volume Sampling (V&S) procedure or a combination thereof.

State of California

AIR RESOURCES BOARD

Resolution 71-9-B

February 17, 1971

WHEREAS, Section 39052(k) of the Health and Safety Code authorized the Air Resources Board to revise its test procedure for emissions from new motor vehicles; and

WHEREAS, The Air Resources Board adopted Resolution 71-9-A which made revisions to the "California Assembly-Line Test Procedures" adopted September 16, 1970.

NOW, THEREFORE, BE IT RESOLVED, That the Air Resources Board hereby repeals, amends and adopts its regulations, Title 13, Chapter 3, Subchapter 2, California Administrative Code, as follows:

Revise Section 2110 to read:

2110. Test Procedures for Assembly-Line or Pre-Delivery Testing.

(a) New motor vehicles will be tested in compliance with the Air Resources Board's "Test Procedure for Assembly-Line or Pre-Delivery Testing of Motor Vehicle Exhaust Emissions," dated March 19 1969. (Abolished after June 30, 1971.)

(b) Beginning July 1, 1971, new motor vehicles will be tested in compliance with the Air Resources Board's "California Assembly-Line Test Procedures." dated September 16, 1970, amended February 17, 1971.

FINDING OF EMERGENCY

The State Air Resources Board finds that an emergency exists and that the foregoing regulations are necessary for the immediate preservation of the public peace, health and safety or general welfare. A statement of the facts constituting such emergency is:

Proceedings for waiver of Federal pre-emption of motor vehicle air pollution control pursuant to section 209(b) of the Federal Clean Air Act will terminate February 22, 1971. In order that the State of California may show that its standards and test procedures are technologically feasible, and thus obtain such a waiver, it is necessary that the above changes be made to existing test procedures clarifying such procedures, eliminating unnecessary duplication with Federal test procedures, and bringing California test procedures into greater conformity with Federal ones.

The said regulations, are therefore adopted as emergency regulations, to take effect immediately upon filing with the Secretary of State as provided in section 11422(c) of the Government Code.

AIR RESOURCES BOARD

State of California

RESOLUTION 71-9-C

WHEREAS, the State Air Resources Board on February 17, 1971, amended Section 2110(b) of Title 13, California Administrative Code, setting forth California assembly-line test procedures for motor vehicles; and

WHEREAS, Section 2110(b) was amended as an emergency regulation as provided for in Section 11421(b) of the Government Code;

NOW THEREFORE BE IT RESOLVED, That after public hearings held pursuant to Section 11422.1(a) of the Government Code, the State Air Resources Board hereby reaffirms the action taken on February 17, 1971 amending Section 2110(b) of Title 13, California Administrative Code.

State of California

AIR RESOURCES BOARD

Resolution 71-10

February 17, 1971

WHEREAS, U. S. Carburetor, P. O. Box 462, Hollister, California 95023, has applied for a permit for the testing of an experimental motor vehicle pollution control device for approval by this Board; and

WHEREAS, the device comprises an experimental carburetor in the development stage; and

WHEREAS, Section 39181 of the Health and Safety Code, authorizes the Board to issue such permits;

NOW, THEREFORE, BE IT RESOLVED, that U. S. Carburetor is hereby granted a permit for testing an experimental motor vehicle pollution control device for a period of one year from this date.

State of California

AIR RESOURCES BOARD

Resolution 71-10-A

April 21, 1971

WHEREAS, U.S. Carburetor, P. O. Box 462, Hollister, California 95023, has applied for five additional permits for the testing of an experimental motor vehicle pollution control device for approval by this Board; and

WHEREAS, the device comprises an experimental carburetor in the developmental stage; and

WHEREAS, U.S. Carburetor was granted a permit for testing an experimental motor vehicle pollution control device by the Board on February 17, 1971; and

WHEREAS, Section 39181 of the Health and Safety Code authorizes the Board to issue such permits,

NOW, THEREFORE, BE IT RESOLVED, That U.S. Carburetor is hereby granted additional permits for operating five (5) test vehicles equipped with an experimental motor vehicle pollution control device for a period of one year from this date.

State of California

AIR RESOURCES BOARD

Resolution 71-11

March 17, 1971

WHEREAS, the Environmental Technology Division of Dresser Industries, 1702 McGaw, Santa Ana, California 92705, has applied for a permit to test an experimental exhaust emission control system on two vehicles; and

WHEREAS, it is intended that the system would provide control of hydrocarbons, carbon monoxide, and nitrogen oxides on both new and used vehicles; and

WHEREAS, the system operates as a control method for the introduction of fuel and air into the intake manifold;

NOW, THEREFORE, BE IT RESOLVED, That the Environmental Technology Division of Dresser Industries is hereby granted two permits for the testing of an experimental emission control device on two vehicles for a period of one year from the above date.



State of California

AIR RESOURCES BOARD

Resolution 71-12

March 17, 1971

WHEREAS, the State of California 1970 Legislative Session enacted Section 27157 into the Vehicle Code; and

WHEREAS, Section 27157 of the Vehicle Code required that the Air Resources Board adopt such reasonable regulations as it determines are necessary for the public health and Safety regarding the maximum allowable emissions of pollutants from vehicles upon a highway; and

WHEREAS, Sections 39051(c) and 39052(i) of the Health and Safety Code authorizes the Air Resources Board to adopt Rules, Regulations and Procedures in accordance with the provisions of the Administrative Procedures Act; and

WHEREAS, a public hearing and other proceedings have been held in accordance with the provisions of the Administrative Procedures Act, Title 2, Government Code;

NOW, THEREFORE, BE IT RESOLVED, That the Air Resources Board hereby adopts, amends, or repeals regulations in Title 13, California Administrative Code, as follows:

Adopts new Section 1945 to read:

1945. Highway Exhaust Emissions (Vehicles under 6,001 lbs. G.V.W.). The State Air Resources Board finds compliance with the standards for exhaust emissions set forth below to be the maximum allowable emissions of pollutants from idling vehicles at California Highway Patrol road inspections. The inspection shall consist of emissions measurements from a hot idling engine with the transmission set in neutral. In accordance with this finding, the standards for such vehicles, tested under the conditions above, are:

a. Domestic Vehicles (1966 through 1969 Model Years).

- 1) With Air Injection Emission Control Systems. Exhaust Emissions from Gasoline-Powered Engines in Used 1966 through 1969 Model Year Vehicles of American Manufacture Shall Not Exceed:

Resolution 71-12

March 17, 1971

Section 1945-Cont'd

- a) Hydrocarbons - 400 parts per million by volume as hexane.\*
- b) Carbon Monoxide 4.0 percent by volume.
- 2) With Engine Modification Emission Control Systems. Exhaust Emissions from Gasoline-Powered Engines in Used 1966 through 1969 Model Year Vehicles of American Manufacture Shall Not Exceed:
  - a) Hydrocarbons - 500 parts per million by volume as hexane.\*
  - b) Carbon Monoxide - 7.0 percent by volume.
- b. Domestic Vehicles (1970 through 1971 Model Years).
  - 1) With Both Engine Modification and Air Injection Control Systems. Exhaust Emissions from all Gasoline-Powered Engines in Used 1970 through 1971 Model Year Vehicles of American Manufacture Shall Not Exceed:
    - a) Hydrocarbons - 350 parts per million by volume as hexane.\*
    - b) Carbon Monoxide - 4.0 percent by volume.
- c. Imported Vehicles (1968 through 1969 Model Years).
  - 1) With Air Injection Emission Control Systems. Exhaust Emissions from Gasoline-Powered Engines in Used 1968 through 1969 Model Year Vehicles of Foreign Manufacture Shall Not Exceed:
    - a) Hydrocarbons - 500 parts per million by volume as hexane.\*
    - b) Carbon Monoxide - 5.0 percent by volume.
  - 2) With Engine Modification Emission Control Systems. Exhaust Emissions from Gasoline-Powered Engines in Used 1968 through 1969 Model Year Vehicles of Foreign Manufacture Shall Not Exceed:
    - a) Hydrocarbons - 700 parts per million by volume as hexane.\*
    - b) Carbon Monoxide - 7.0 percent by volume.

Section 1945-Cont'd

d. Imported Vehicles (1970 through 1971 Model Years).

1) With Air Injection Emission Control Systems.  
Exhaust Emissions from Gasoline-Powered Engines  
in Used 1970 through 1971 Model Year Vehicles  
of Foreign Manufacture Shall Not Exceed:

- a) Hydrocarbons - 300 parts per million by  
volume as hexane.\*
- b) Carbon Monoxide - 3.0 percent by  
volume.

2) With Engine Modification Emission Control Exhaust  
Emissions from Gasoline-Powered Engines in Used  
1970 through 1971 Model Year Vehicles of Foreign  
Manufacture Shall Not Exceed:

- a) Hydrocarbons - 600 parts per million by  
volume as hexane.\*
- b) Carbon Monoxide - 5.0 percent by volume.

\*As measured by a non-dispersive infrared instrument.

STATE OF CALIFORNIA  
AIR RESOURCES BOARD

RESOLUTION 71-13A  
MAY 19, 1971

WHEREAS, one hundred and sixty-eight research proposals have been submitted to the Air Resources Board under the provisions of SB 848 (1970 Stats, Ch. 1599) and AB 16 (1970 Stats, Ch. 1579); and

WHEREAS, the proposals have been evaluated by the Research Proposal Screening Committee as required under SB 848; and

WHEREAS, the Executive Committee of the Board has approved, in addition to the nineteen identified in Resolution 71-13, six more of these proposals for funding, in a total amount not exceeding \$415,550;

NOW THEREFORE BE IT RESOLVED that the Air Resources Board under the powers and authority granted in SB 848 (1970 Stats. Ch. 1599) hereby accepts the recommendations of the Research Proposal Screening Committee and the Executive Committee of the Board and approves six proposals (listed in Exhibit A) submitted under SB 848 and authorizes the Executive Officer to initiate administrative procedures and to execute all necessary documents and contracts for the research effort proposed in these six proposals in an amount not to exceed the sum of \$415,550:

UNIVERSITY OF CALIFORNIA (SB 848)

<u>ARB Proposal No.</u>	<u>Title</u>	<u>Organization/ Investigator</u>
5-143-2	Photochemical Smog: Reactions of Hydroxyl with Aldehydes	UCD/ Volman
7-076-1	Sensitivity Measurements of Oxidant Air Pollution Damage and Antioxidant Protection Applicable to Humans	UCD/ Tappel
7-077-1	Development of a Biological System for Quantitating the Respiratory Hazard of Ambient Concentrations of Air Pollutants and Evaluation of Vitamin E in the Prevention of Oxidant Induced Impairment	UCD/ Goldstein
7-078-1	Heme Metabolism and Red Blood Cell Survival in Lead-intoxicated Animals	UCB/ Lawrence
7-096-1	Physiological Effects of Air Pollutants During Long and Short-term Work in 25 and 35 C Temperatures	UCSB/ Raven

NON-UNIVERSITY OF CALIFORNIA (SB 848)

7-083-1	Health Effects and Food Chain Impact of Atmospheric Lead	California State Department of Public Health/ Goldsmith
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State of California  
Air Resources Board

Resolution 71-13

March 17, 1971

WHEREAS, one hundred and thirty-five research proposals have been submitted to the Air Resources Board under the provisions of SB 848 (1970 Stats. Ch. 1599) and AB 16 (1970 Stats. Ch. 1579); and

WHEREAS, the proposals have been evaluated by the Research Proposal Screening Committee as required under SB 848 and

WHEREAS, the Executive Committee of the Board sitting with the Screening Committee has approved nineteen (listed in Exhibit A) of these proposals for funding, in a total amount not exceeding \$1,094,848;

NOW THEREFORE BE IT RESOLVED that the Air Resources Board under the powers and authority granted in SB 848 (1970 Stats. Ch. 1599) hereby accepts the recommendations of the Research Proposal Screening Committee and the Executive Committee and approves nineteen proposals (listed in Exhibit A) submitted under SB 848 and AB 16 (1970 Stats. Ch. 1579) and authorizes the Executive Officer, John Maga, to initiate administrative procedures and to execute all necessary documents and contracts for the research effort proposed in these nineteen proposals in an amount not to exceed the sum of \$1,094,848:

-2-

UNIVERSITY OF CALIFORNIA (SB 848)

<u>ARB Proposal No.</u>	<u>Title</u>	<u>Organization/ Investigator</u>
2-009-1	Design, Construction and Testing of Catalytic Afterburners for Removal of Air Pollutants Formed in Automatic Combustion Processes	UCLA Nobe
2-017-1	Air Pollution from Forest and Agricultural Burning	UCR Darley
3-038-1	Cyclotron Analysis of Atmospheric Contaminants	UCD Cahill
3-039-1	Analysis of Peroxybenzoyl Nitrate in Smog	UCR Stephens
3-042-1	Elemental Analysis of Air Filter Samples Using X-Ray Fluorescence	LRL Camp
4-053-1	Outdoor-Indoor Levels of Air Pollution	UCR Riverside Thompson
4-054-1	Asbestos Fibers in Ambient Air in California	UCB Cooper
5-066-1	Proposal for Comprehensive Chemical Characterization of Automobile Fuels and Exhaust Emissions and Examination of Compositional Changes in Exhaust Introduced by Fuel and Engine Design Variations	UCB Calvin
5-067-1	The Effects of Fuel Modification and Control Systems on Exhaust Emissions and Their Reactivity in Photochemical Smog	UCR Pitts
5-068-1	Mesoclimatic Wind Pattern and their Application for Abatement of Air Pollution in the Central California Valley	UCD Schultz
7-097-1	Influence of Carbon Monoxide on Cardiac Dynamics in Normal and Cardiovascular Stressed Animals	UCSB Horvath

UNIVERSITY OF CALIFORNIA (AB 16)

1-101-1	Combustive Disposal of Rice Straw	UCD Gross
1-1-2-1	Rice Straw Incinerator Evaluation	UCD Miller

-3-

<u>ARB Proposal No.</u>	<u>Title</u>	<u>Organization/ Investigator</u>
2-098-1	Crop Residue Management by Soil Incorporation	UCD Grigarick
5-099-1	Determination of Temperature, Winds and Particulate Concentrations in the Atmosphere	UCD Carroll

OUTSIDE RESEARCH ORGANIZATIONS (SB 848)

* 2-131-1	Proposal for Additional Vehicle Emission Testing Under ARB Contract No. 1522	Northrop Howard
3-043-1	Automation of Air Quality Monitoring Stations	North American Rockwell Lauer
3-046-1	Sub-Micron Particulate Analyzer	Royco Instruments, Inc. Lieberman
5-069-1	Capability of Meteorological and Pollution- Source Data Base to Support Atmospheric Models	Physics International Rainey

\* Evaluation of used car control systems



STATE OF CALIFORNIA  
AIR RESOURCES BOARD

RESOLUTION 71-13B  
MAY 19, 1971

WHEREAS, at the request of the Research Proposal Screening Committee of the Air Resources Board, topical conferences on four research categories were convened in Sacramento from April 19 to 23, 1971; and

WHEREAS, the Research Proposal Screening Committee has found that, because of the conferences, conditions existing when one of the projects listed in Exhibit A of Resolution 71-13, adopted by the Board at its meeting on March 17-18, no longer prevail.

NOW THEREFORE BE IT RESOLVED that the Air Resources Board revokes the authorization of the Executive Officer granted in Resolution 71-13 to institute administrative proceedings and to execute documents with respect to Proposal No. 5-069-1, entitled, "Evaluation of Meteorological, Emission Source Inventory and Air Quality Data Bases with Respect to Atmospheric Simulation Modeling," submitted by the Physics International Company of San Leandro, California; and

RESOLVED FURTHER that the amount of money authorized for expenditure under Resolution 71-13 is reduced accordingly.

STATE OF CALIFORNIA  
AIR RESOURCES BOARD  
RESOLUTION 71-13C  
JUNE 16, 1971

WHEREAS, one hundred and seventy-six research proposals have been submitted to the Air Resources Board under the provisions of SB 848 (1970 Stats. Ch. 1599) and AB 16 (1970 Stats. Ch. 1579); and

WHEREAS, the proposals have been evaluated by the Research Proposal Screening Committee as required under SB 848; and

WHEREAS, the Screening Committee of the Board has approved, in addition to the twenty-four identified in Resolution 71-13, 71-13A, 71-13B two more of these proposals for funding, in a total amount not exceeding \$37,000.

NOW THEREFORE BE IT RESOLVED that the Air Resources Board under the powers and authority granted in SB 848 (1970 Stats. Ch. 1599) hereby accepts the recommendations of the Research Proposal Screening Committee and approves 2 proposals (listed in Exhibit A) submitted under SB 848 and authorizes the Executive Officer, John Maga, to initiate administrative procedures and to execute all necessary documents and contracts for the research effort proposed in these 2 proposals in an amount not to exceed the sum of \$37,000.

State of California

AIR RESOURCES BOARD

Resolution 71-13D

July 21, 1971

WHEREAS, one hundred and eighty-two research proposals have been submitted to the Air Resources Board under the provisions of SB 848 (1970 Stats. Ch. 1599) and AB 16 (1970 Stats. Ch. 1579);

WHEREAS, the proposals have been evaluated by the Research Proposal Screening Committee as required under SB 848; and

WHEREAS, the Executive Committee of the Board has approved, in addition to the twenty-six identified in Resolution 71-13, 71-13A, 71-13B, 71-13C one more of these proposals for funding, in a total amount not exceeding \$86,806,

NOW, THEREFORE, BE IT RESOLVED, That the Air Resources Board under the powers and authority granted in SB 848 (1970 Stats. Ch. 1599) hereby accepts the recommendations of the Research Proposal Screening Committee and approves one proposal (listed in Attachment A) submitted under SB 848, subject to the recommendations of the Screening Committee regarding additional details of the study, and authorizes the Executive Officer, John Maga, to initiate administrative procedures and to execute all necessary documents and contracts for the research effort proposed in this proposal in an amount not to exceed the sum of \$86,806.

*maga*

State of California  
AIR RESOURCES BOARD

April 21, 1971

Resolution 71-14

Reporting of Gasoline  
Volatility

Resolved, that Sections 1992, 1993 and 1994 be added to Title 13, California Administrative Code to read:

1992. Monthly Reports. Every person who delivers gasoline to a gasoline storage tank or gasoline system from which the gasoline tank of a motor vehicle is filled shall report monthly that gasoline so delivered by him complied with the standards of Sections 1990 and 1991 of Title 13, California Administrative Code.

1993. Form of Reports. The report required by Section 1992 shall be sworn or executed under penalty of perjury, shall be filed on or before the first day of the second calendar month following the close of the monthly period to which it relates, and shall be substantially in the following form:

"The undersigned hereby certifies that <sup>to the best -</sup> the gasoline delivered by him to gasoline fuel tanks and gasoline fuel systems, known to him to be tanks or systems from which the gasoline tanks of motor vehicles are filled, during the month of \_\_\_\_\_, 19\_\_\_\_, did not exceed the Reid vapor pressure of 9 p.s.i., as required by Section 1991 of Title 13, California Administrative Code and that all gasoline delivered by him in the South Coast Air Basin as defined in the California Administrative Code, did not exceed the Bromine Number of 30 as required by Section 1990 of Title 13, California Administrative Code.

"I declare under penalty of perjury that the foregoing is true and correct.\*

"Executed at \_\_\_\_\_, California, on \_\_\_\_\_, 19\_\_\_\_.

"

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\* Reports executed outside California must be sworn in lieu of the declaration under penalty of perjury. If filed by a corporation, the report shall be signed by an officer or authorized employee in his individual capacity, and the report shall include his title or position.

If no gasoline was delivered in the South Coast Basin during the specified month, the report shall be modified accordingly.

The report shall be filed with the State Air Resources Board, 1108 - 14th Street, Sacramento, California 95814.

1994. Licensed Distributors. Every person licensed as a distributor of motor vehicle fuel by the State Board of Equalization pursuant to Section 7451 of the Revenue and Taxation Code shall file a monthly report as required by Sections 1992 and 1993 or shall file a sworn statement or declaration under penalty of perjury to the effect that, during the designated month, it delivered no gasoline in any area where gasoline was regulated during that month under Sections 1990 and 1991.

If a licensed distributor expects to make no deliveries in the 12-month period July 1 through June 30 for which reports must be filed, the distributor may in lieu of the monthly report required herein, file between May 1 and June 30 preceding such 12-month period a sworn statement or declaration under penalty of perjury to this effect; such person shall be exempt from the requirements of Section 1992 unless and until he delivers gasoline which would otherwise have to be reported pursuant to Section 1992.

## State of California

## AIR RESOURCES BOARD

## Staff Report

Exhaust Emission Control System  
(Forklifts)Impco Carburetion Division of  
A. J. Industries

The Impco Carburetion Division of A. J. Industries has submitted an application containing all the test data for new and used engines required by the California Exhaust Emission Test Procedure for Portable and Mobile Internal Combustion Engines (Forklifts) Used Inside Buildings.

The applicant's exhaust emission control system comprises a LPG (liquified petroleum gas) regulator and the Impco carburetor models listed below:

Emission Data of Each Test Engine  
Projected to 1,500 Hours

Carburetor Model	Engine Class	Engine Size	Forklift Make	Emissions CO%	
				Test	Standard
CA 100	133	A3	Mobilift	.2	2.0
CA 100	133	A3	Mobilift	.2	2.0
CA 100	133	A3	Mobilift	.1	2.0
CA 100	133	A3	Mobilift	.2	2.0
CA 100	162	B	Towmotor	.3	1.5
CA 100	162	B	Towmotor	.6	1.5
CA 100	162	B	Towmotor	.6	1.5
CA 100	162	B	Towmotor	.3	1.5
CA 100	230	C	Yale	.2	1.5
CA 100	230	C	Yale	.9	1.5
CA 100	230	C	Yale	.2	1.5
CA 100	230	C	Yale	.8	1.5
CA 100	230	C	Yale	.9	1.5
CA 100	230	C	Yale	.2	1.5
CA 125	226	C	Clark	.2	1.5
CA 125	226	C	Clark	.2	1.5
CA 125	226	C	Clark	.2	1.5
CA 125	226	C	Clark	.2	1.5

Each test engine in the approval fleet met the emission standard.

Based on the test data and other information submitted by the applicant, the staff finds that the Impco exhaust emission control system meets California requirements. The staff, therefore, recommends adoption of Resolution 71-15.

4/21/71

State of California

AIR RESOURCES BOARD

PROPOSED  
Resolution 71-15

April 21, 1971

WHEREAS, the Impco Division of A. J. Industries submitted an application and all test data for California approval of an exhaust emission control system for portable and mobile internal combustion engines (forklifts) used inside buildings; and

WHEREAS, the applicant's exhaust emission control system is described as a LPG (liquified petroleum gas) fuel system with major elements:

- (1) Impco carburetor and regulator using liquified petroleum gas,
- (2) recommended maintenance.

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Article 5,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, Division 26 of the Health and Safety Code,

Issue a resolution of approval to the Impco Division of A. J. Industries with respect to its exhaust emission control system for new and used portable and mobile internal combustion engines (forklifts) for the following carburetor models and engine size classes:

<u>Carburetor Model</u>	<u>Engine Size Class</u>	<u>Engine Size Displacement</u>
CA 100	A3, B, C	100-250 cubic inches
CA 125	C	200-250 cubic inches

State of California  
AIR RESOURCES BOARD

RESOLUTION 71-16  
March 17-18, 1971

WHEREAS, the installation of exhaust emission control devices on 1966 through 1970 light-duty vehicles has resulted in an increase in the emission of oxides of nitrogen from said vehicles;

WHEREAS, the Air Resources Board is not permitted by the Health and Safety Code to certify a device for the control of oxides of nitrogen for such vehicles; and

WHEREAS, the failure to certify exhaust emission control devices for used vehicles has resulted in one of the largest sources of pollutants in the air of California to remain largely uncontrolled;

NOW THEREFORE BE IT RESOLVED, That the Air Resources Board recommends that legislation be enacted which would permit the Air Resources Board, for 1966 through 1970 model-year light-duty vehicles, to establish exhaust emission standards for oxides of nitrogen, to certify devices for the control of oxides of nitrogen, to determine in which counties the devices would be installed, and to establish a schedule of installation for the devices.



State of California  
AIR RESOURCES BOARD

RESOLUTION 71-17  
March 17-18, 1971

WHEREAS, the Air Resources Board is not permitted by the Health and Safety Code to require devices for the control of hydrocarbons, carbon monoxide and oxides of nitrogen which do not meet the emission standards of Section 39107 of the Health and Safety Code; and

WHEREAS, the failure to require exhaust emission control devices for used vehicles has resulted in one of the largest sources of pollutants in the air of California to remain largely uncontrolled;

NOW THEREFORE BE IT RESOLVED, That the Air Resources Board recommends that legislation be enacted which would permit the Air Resources Board, for 1955 through 1965 model year light-duty vehicles, to establish emission standards for hydrocarbons, carbon monoxide and oxides of nitrogen, to certify devices for the control of one or more of these pollutants providing the remaining pollutants were not significantly increased, to determine in which counties the devices would be installed, and to establish schedules of installation for such devices.

State of California  
AIR RESOURCES BOARD

RESOLUTION 71-18  
March 17-18, 1971

WHEREAS, one of the major problems in certifying devices for the control of emissions from used vehicles has been the lack of proper distribution for any certified device; and

WHEREAS, because used vehicles contribute significantly to the air pollution problem in California and because the manufacturers of these vehicles are uniquely in a position to make and market emission control devices for their used vehicles, the manufacturers of vehicles should be required to assist in making emission control devices for their used vehicles generally available to the public;

NOW THEREFORE BE IT RESOLVED, That the Air Resources Board recommends that legislation be enacted which would permit the board to require the manufacturers of new vehicles sold in California to make available to the owners of used vehicles manufactured by them any device certified by the Board; the legislation would further provide that a manufacturer's failure to comply with this requirement could, in the discretion of the Air Resources Board, result in the denial of approval of that manufacturer's new vehicles for sale in California or, if such approval is not required because of federal preemption, such manufacturer could be fined \$100 for each new vehicle sold in California from the time of its failure to comply.

State of California

AIR RESOURCES BOARD

Resolution 71-19

March 17-18, 1971

WHEREAS, the existence of lead in the atmosphere presents a serious problem to the health and well-being of the residents of California;

WHEREAS, the Air Resources Board has previously established an ambient air quality standard for lead;

WHEREAS, the Air Resources Board has authority to certify devices which would control the emission of lead and other pollutants from motor vehicles; and

WHEREAS, statutory authority is unclear as to the schedule of installation and the enforcement of such installation for devices which control pollutants from motor vehicles other than hydrocarbons, carbon monoxide and oxides of nitrogen;

NOW THEREFORE BE IT RESOLVED, that the Air Resources Board recommends that legislation be enacted which would permit the Air Resources Board, after consultation with the California Highway Patrol and Department of Motor Vehicles, to adopt regulations which would allow the Board, with respect to devices controlling pollutants other than hydrocarbons, carbon monoxide and oxides of nitrogen, to designate the class of vehicles on which such devices would be required, to determine in which counties such devices would be installed and to establish a schedule for installation of such devices; the legislation would further specify that the Department of Motor Vehicles and the California Highway Patrol would enforce the requirements for the installation of such devices in accordance with the regulations adopted by the Board.

State of California  
AIR RESOURCES BOARD  
March 17, 1971

METEOROLOGICAL CRITERIA FOR  
REGULATING AGRICULTURAL BURNING

The criteria given below are for the (I) Sacramento Valley (North and South Sections), (II) San Joaquin Valley, (III) San Francisco Bay Area, (IV) South Coast, (V) North Central Coast, and (VI) South Central Coast Air Basins.

A burn day will be announced for the South Coast Air Basin when any of the criteria listed for that basin is satisfied. For any other basin, or section of the Sacramento Valley Air Basin, a burn day will be announced when all the criteria listed for that basin, or section, are satisfied.

**I Sacramento Valley Air Basin**

**A. North Section: Shasta, Tehama, Plumas, Butte and Glenn Counties**

1. Near the time of day when the surface temperature is at a minimum, the 3000 foot temperature is not warmer than the surface temperature by more than 5 degrees Fahrenheit.
2. The expected daytime 3000 foot temperature is colder than the expected surface temperature by at least 11 degrees Fahrenheit for 4 hours.
3. The expected daytime wind speed at 3000 feet is at least 5 miles per hour.

**B. South Section: Colusa, Sutter, Yuba, Sierra, Nevada, Placer, El Dorado, Sacramento and Yolo Counties**

1. Near the time of day when the surface temperature is at a minimum, the 3000 foot temperature is not warmer than the surface temperature by more than 13 degrees Fahrenheit.
2. The expected 3000 foot temperature is colder than the expected surface temperature by at least 11 degrees Fahrenheit for 4 hours.
3. The expected daytime wind speed at 3000 feet is at least 5 miles per hour.

**II San Joaquin Valley Air Basin**

1. Near the time of day when the surface temperature is at a minimum, the 3000 foot temperature is not warmer than the surface temperature by more than 13 degrees Fahrenheit.

2. The expected 3000 foot surface temperature is colder than the expected surface temperature by at least 11 degrees Fahrenheit for 4 hours.
3. The expected daytime wind speed at 3000 feet is at least 5 miles per hour.

### III San Francisco Bay Area Air Basin

1. Near the time of day when the surface temperature is at a minimum, the 2500 foot temperature is not warmer than the surface temperature by more than 12 degrees Fahrenheit except that during May through September it is not warmer by more than 18 degrees Fahrenheit.
2. The expected daytime 2500 foot temperature is colder than the expected surface temperature by at least 10 degrees Fahrenheit for 4 hours.
3. The expected daytime wind speed at 3000 feet is at least 5 miles per hour.

### IV South Coast Air Basin

1. The height of the inversion base, if any, at 4:00 a.m. at Los Angeles Airport is above 1500 feet mean sea level.
2. The expected maximum mixing height during the day is 3500 feet or higher.
3. The expected mean surface wind speed between 6:00 a.m. and noon is 5 miles per hour or greater.

### V North Central Coast Air Basin

1. Near the time when the surface temperature is at a minimum, the temperature difference through a surface-based inversion, if any, is less than 7 degrees Fahrenheit.
2. During May-September, the expected afternoon onshore airflow at the coastline is at least 5 miles per hour.

### VI South Central Coast Air Basin

1. Near the time when the surface temperature is at a minimum, the temperature difference through a surface-based inversion, if any, is less than 11 degrees Fahrenheit.
2. During May-September, the expected afternoon on shore airflow at the coastline is at least 5 miles per hour.

Notwithstanding the above criteria, the Board may announce burn or no-burn days based on expected meteorological conditions and on the estimated effect on air quality of the agricultural burning.

State of California

AIR RESOURCES BOARD

RESOLUTION 71-20

March 17, 1971

WHEREAS, Section 39298.2 of the Health and Safety Code (Chapter 1579 of the California Statute of 1970) directs the Air Resources Board to promulgate guidelines for the regulation and control of agricultural burning for each of the air basins established by the Board; and

WHEREAS, the guidelines must be promulgated no later than March 20, 1971, for the following basins: Sacramento Valley, San Joaquin Valley, Bay Area, South Coast, North Central Coast, and South Central Coast; and

WHEREAS, Section 39298.3 of the Health and Safety Code states that the guidelines promulgated by the Board shall be based on meteorological data, the nature and volume of materials to be burned, and the probable effect of such burning on the ambient air quality within the air basins affected; and

WHEREAS, the guidelines have been developed in accordance with the provisions in the Health and Safety Code; and

WHEREAS, in the development of the guidelines the Air Resources Board has consulted with representatives of air pollution control agencies, farm bureaus, agricultural commissions, University of California Agricultural Extension Service, and agricultural associations; and

WHEREAS, meetings have been held on the proposed guidelines;

NOW, THEREFORE, BE IT RESOLVED, That the Air Resources Board adopts the document entitled, "Meteorological Criteria for Regulating Agricultural Burning" dated March 17, 1971; and

BE IT FURTHER RESOLVED, That the Air Resources Board adopts for inclusion in Title 17 of the California Administrative Code, Subchapter 2, Burning, Article 1, Agricultural Burning Guidelines.

State of California

AIR RESOURCES BOARD

Resolution 71-21

April 21, 1971

WHEREAS, Dr. Walter Ott, c/o Quality Plus, 741 North Lake Street, Burbank, California 91502, has applied for two (2) permits for the testing of an experimental motor vehicle pollution control device for approval by this Board; and

WHEREAS, the device comprises a sonic generator located in a base plate between the carburetor and the intake manifold; and

WHEREAS, Section 39181 of the Health and Safety Code, authorizes the Board to issue such permits,

NOW, THEREFORE, BE IT RESOLVED, That Dr. Walter Ott is hereby granted two (2) permits for testing an experimental control device for a period of one year from this date.

State of California

AIR RESOURCES BOARD

Resolution 71-22

March 17, 1971

WHEREAS, Beam Products Manufacturing Company, 3040 Rosslyn Street, Los Angeles, California has applied for the testing of an experimental motor vehicle pollution control device for approval by this Board; and

WHEREAS, the device consists of liquid petroleum gas (LPG) carburetor, pressurized tank, pressure regulator, shutoff valves and fuel lines; and

WHEREAS, Section 39181 of the Health and Safety Code, authorizes the Board to issue such permits;

NOW, THEREFORE, BE IT RESOLVED, That Beam Products Manufacturing Company is hereby granted six (6) permits for testing an experimental control device installed on six vehicles, for a period of one year from this date.



State of California

AIR RESOURCES BOARD

Resolution 71-23

March 17, 1971

WHEREAS, Energy Transmission Corporation, 2330 West Third Street, Los Angeles, California, has applied for a permit for the testing of an experimental motor vehicle pollution control device for approval by this Board; and

WHEREAS, the device comprises an experimental carburetor requiring the replacement of the crankcase emission control device; and

WHEREAS, Section 39181 of the Health and Safety Code, authorizes the Board to issue such permits;

NOW, THEREFORE, BE IT RESOLVED, That Energy Transmission Corporation is hereby granted a permit for testing an experimental control device for a period of one year from this date.

State of California

AIR RESOURCES BOARD

Staff Report  
REI Industries Inc.

Evaluation of the "Paser Magnum" Device

I. Introduction

This report is a summary of the staff's evaluation of the "Paser Magnum" device. The basis for this report is the "Air Resources Board Criteria for Determining Compliance with Section 27156 of the Vehicle Code," adopted February 17, 1971. This report is only concerned with the effect on exhaust emission levels due to the installation of the device; no evaluation was made of claims of other effects, such as on performance and driveability of the vehicle. In no way does the report imply an endorsement by the staff of any beneficial effects of the Paser Magnum device.

II. Description of the Device

The device consists of a set of adapters designed to be inserted in the spark plug wire receptacles of the distributor. Each adapter is interconnected by an insulated wire. A plastic coated metal rod is located in the center of each adapter. There is no electrical connection between the rod and the insulated wire connecting the adapters.

III. Evaluation

A mechanism for deteriorating emissions would be the resistance to current flow through the adapter rod and the dissipation of firing current by induction through the wiring connecting the adapters. An oscilloscope test showed no difference in the firing pattern with or without the device. Emissions tests were performed on four late model vehicles with the following results:

Emissions Test of Paser Magnum

<u>Test Car</u>	<u>Device</u>	<u>Exhaust Emissions (g./mi.)</u>			<u>Fuel Consumption</u> <u>mi./gal.</u>
		<u>HC</u>	<u>CO</u>	<u>NO<sub>2</sub></u>	
'71 American Motors 304 CID	No	1.31	15.8	2.5	12.8
	Yes	1.21	13.6	2.2	13.7
'70 Dodge Dart 225 CID	No	2.31	16.7	6.0	19.9
	Yes	2.42	17.2	5.5	18.9
'68 Oldsmobile 350 CID	No	3.19	16.3	5.23	13.9
	Yes	3.28	14.3	5.4	14.0
'67 Chevrolet 194 CID	No	1.78	14.3	2.0	16.4
	Yes	1.67	15.1	2.42	15.8

The above data support the staff judgment that the "Paser Magnum" device has no effect on emissions.

#### IV. Conclusions and Recommendations

The staff has found no evidence to support the claim by the applicant that the "Paser Magnum" device reduces emissions. It has also found no evidence that it will reduce the effectiveness of required existing emission control devices. The staff therefore recommends that the Board find that the "Paser Magnum" device be exempt from the prohibitions of Section 27156 of the Vehicle Code.

The Paser Magnum is presently being advertised as an anti-pollution device with claims such as:

- 1) fight air pollution
- 2) guaranteed up to 100% reduction in hydrocarbons.

Since this device was never certified or approved by the Board as a motor vehicle pollution control device, it may be in violation of Sections 39130 and 39184 of the Health and Safety Code. The staff is consulting with the Attorney General on the matter.

State of California  
AIR RESOURCES BOARD

Resolution 71-25

April 21, 1971

WHEREAS, REI Industries of Dallas, Texas, has submitted an application for a Board finding that its "Paser Magnum" device is exempt from the prohibitions of Section 27156 of the California Vehicle Code; and

WHEREAS, the prohibitions of Section 27156, as amended on November 23, 1970, do not apply to an alteration, modification, or modifying device, apparatus, or mechanism found by resolution of the State Air Resources Board either to not reduce the effectiveness of any required motor vehicle pollution control device or to result in increased emissions from such modified or altered vehicle; and

WHEREAS, the Air Resources Board staff has made an engineering evaluation of the "Paser Magnum" device and has concluded that the device will not significantly affect emissions and the staff has also tested the device and the test results indicate that it causes no significant increase or reduction in emissions;

NOW, THEREFORE, BE IT RESOLVED, That this Board find that the "Paser Magnum" device does not reduce the effectiveness of any required motor vehicle pollution control device and is therefore exempt from the prohibitions in Section 27156 of the Vehicle Code; and

BE IT FURTHER RESOLVED, THAT THE EXECUTIVE OFFICER IS INSTRUCTED TO ADVISE REI INDUSTRIES THAT THIS RESOLUTION HAS BEEN PASSED AND THAT THE RESOLUTION DOES NOT CONSTITUTE A CERTIFICATION, ACCREDITATION, APPROVAL, OR ANY OTHER TYPE OF ENDORSEMENT BY THE AIR RESOURCES BOARD OF ANY CLAIMS OF THE APPLICANT CONCERNING ANTI-POLLUTION BENEFITS, OR ANY OTHER ALLEGED BENEFITS OF THE "PASER MAGNUM" DEVICE.

State of California  
AIR RESOURCES BOARD

April 21, 1971

Resolution 71-26

WHEREAS, Sky Corporation, Stockton, California, has submitted an application for a Board finding that its "Frantz Vapor Injector" device is exempt from the prohibitions of Section 27156 of the California Vehicle Code; and

WHEREAS, the prohibitions of Section 27156, as amended on November 23, 1970, do not apply to an alteration, modification, or modifying device, apparatus, or mechanism found by resolution of the State Air Resources Board either to not reduce the effectiveness of any required motor vehicle pollution control device or not to result in increased emissions from such modified or altered vehicle; and

WHEREAS, based on an engineering evaluation and test data, the staff has concluded that the "Frantz Vapor Injector" device will not significantly reduce the effectiveness of emission control devices on 1970 model year and earlier vehicles with engine displacement over 140 cubic inches; and

NOW, THEREFORE, BE IT RESOLVED, That this Board find that the "Frantz Vapor Injector" device does not reduce the effectiveness of any required motor vehicle pollution control device for 1970 model year and earlier vehicles with engines over 140 cubic inch displacement and is therefore exempt from the prohibitions in Section 27156 of the Vehicle Code, as to such vehicles; and

IT IS FURTHER RESOLVED THAT THE EXECUTIVE OFFICER IS INSTRUCTED TO ADVISE SKY CORPORATION THIS RESOLUTION HAS BEEN ADOPTED AND THAT THE RESOLUTION DOES NOT CONSTITUTE A CERTIFICATION, ACCREDITATION, APPROVAL, OR ANY OTHER TYPE OF ENDORSEMENT BY THE AIR RESOURCES BOARD OF ANY CLAIMS OF THE APPLICANT CONCERNING ANTIPOLLUTION BENEFITS OR ANY OTHER ALLEGED BENEFITS OF THE "FRANTZ VAPOR INJECTOR" DEVICE.

April 26, 1971

Mr. William S. Hoyle  
General Manager

~~████████████████████~~  
1850 S. El Dorado  
Stockton, California 95207

Gentlemen:

Attached is a copy of a resolution which was passed by the Air Resources Board on April 21, 1971. This resolution exempts the Frantz Vapor Injector device from the prohibitions of Section 27156 of the Health and Safety Code.

I am instructed by the resolution to advise you that this resolution does not constitute a certification, accreditation, approval or any other type of endorsement of the Air Resources Board of any of your claims concerning anti-pollution benefits or any other alleged benefits of the Frantz Vapor Injector device.

John A. Naga  
Executive Officer

Attachment

CWS:ct

State of California

AIR RESOURCES BOARD

Resolution 71-27

April 21, 1971

WHEREAS, Norris Industries, 5215 South Boyle Avenue, Los Angeles, California has applied for the testing of an experimental motor vehicle pollution control device for accreditation by this Board; and

WHEREAS, the device consists of exhaust gas recirculation and engine modification for the control of oxides of nitrogen emissions from used cars ranging from 1966 through 1970 models; and

WHEREAS, Section 39181 of the Health and Safety Code, authorizes the Board to issue such permits;

NOW, THEREFORE BE IT RESOLVED, That Norris Industries is hereby granted fifty (50) permits for testing an experimental oxides of nitrogen control device installed on fifty vehicles, for a period of one year from this date.

## AIR RESOURCES BOARD

108 FOURTEENTH STREET  
SACRAMENTO 95814



April 26, 1971

Mr. M. R. Watters  
4199 George Avenue  
San Mateo, California

*Board Members*

A. J. HAAGEN-SMIT, Ph.D., *Chairman*  
JOSEPH F. BOYLE, M.D.  
MRS. CHARLES EDWARD CHAPEL  
ROBERT C. COZENS  
JERRY W. FIELDER  
JOHN G. HOLMES  
WILLARD F. LIBBY, Ph.D.  
JOHN G. MILES  
FRED F. PERELLI-MINETTI  
LOUIS F. SAYLOR, M.D.  
WALTER R. SCHMID  
GERALD A. SHEARIN  
JAMES G. STEARNS  
HAROLD SULLIVAN

*Executive Officer*

JOHN A. MAGA

Dear Mr. Watters:

Attached is a copy of a resolution which was passed by the Air Resources Board on April 21, 1971. This resolution exempts the Controlled Vapor Injector device from the prohibitions of Section 27156 of the Health and Safety Code.

I am instructed by the resolution to advise you that this resolution does not constitute a certification, accreditation, approval or any other type of endorsement of the Air Resources Board of any of your claims concerning anti-pollution benefits or any other alleged benefits of the Controlled Vapor Injector device.

John A. Maga  
Executive Officer

Attachment



State of California  
AIR RESOURCES BOARD

Staff Report

Evaluation of a "Controlled Vapor Injection" Device

I. Introduction

This report is a summary of the staff's evaluation of "C.V.I. or Controlled Vapor Injector" device. The basis for this report is the "Air Resources Board Criteria for Determining Compliance with Section 27156 of the Vehicle Code," adopted February 17, 1971. This report is only concerned with the affects on exhaust emission levels due to the installation of the device; no consideration was given to its affects on performance and driveability of the vehicle. In no way does the report imply an endorsement by the staff of any beneficial effects of the "Controlled Vapor Injector" device.

II. Description of the Device

The "C.V.I." consists of a plastic covered glass reservoir containing a solution of volatile solvent. One end of tubing is connected to this plastic cover and the other end is connected to a "T" inserted between the P.C.V. valve and the intake valve. A screw adjustment on the plastic cap regulates an orifice which limits the flow of air and vapor from the glass jar to the intake manifold.

III. Engineering Evaluation

The "Controlled Vapor Injector" is one of a number of commercial devices for introducing a small amount of organic vapor into the intake manifold. The effect of such introduction in normal operation is innocuous. If the liquid container becomes exhausted, however, air drawn through the system will lean the air/fuel mixture to some degree. The maximum air flow through the "C.V.I." system under this condition was found to be 0.2 cfm. However, if the adjustment screw should be removed then nearly 0.9 cfm of air would be drawn through. It is the staff's judgement that this amount of leaning can be tolerated without adverse affects on hydrocarbon or carbon monoxide emissions from vehicles with engines greater than 250 CID. The oxides of nitrogen control systems on 1971 and later models would, however, have reduced effectiveness under these conditions; i.e., emissions of  $\text{NO}_x$  would be increased. Furthermore, the sealed idle adjustment on some 1971 models would make it difficult to compensate the

Evaluation of a "Controlled Vapor Injection" Device

III. Engineering Evaluation - Cont'd

idle mixture for additional air induction through the device. In this case the vehicle might idle roughly and the owner would be tempted to have the idle seal broken for readjustment.

The device is not expected to reduce the effectiveness of crankcase and evaporative emission control systems.

IV. Conclusion and Recommendation

The staff has found no evidence that the "Controlled Vapor Injector" will reduce the effectiveness of required existing motor vehicle emission control devices in vehicles prior to the 1971-model year with engine size classes D through F. The staff, therefore, recommends that the Board find that the "Controlled Vapor Injector" device be exempt from the prohibitions of Section 27156 of the Vehicle Code for all vehicles prior to the 1971-model years with engines greater than 250 cubic inch displacement.

Resolution 71-28

April 21, 1971

State of California

AIR RESOURCES BOARD

Staff Report

Algas Industries, Inc.  
Application for Motor Vehicles Modified  
To Use Liquified Petroleum Gas

April 21, 1971

Algas Industries, Inc., has submitted an application for approval of their carburetors to be used on vehicles modified to use liquified petroleum gas. The data submitted are shown below:

<u>Carburetor Model</u>	<u>Engine Size Class</u>	<u>Test Engine Size Cu. In.</u>	<u>Test Vehicle</u>	<u>HC-gms/mi</u>	<u>CO-gms/mi</u>	<u>NO<sub>2</sub>-gms/mi</u>
PCA 500 C	(e)	302	1970 Ford	0.45	2.63	1.15
PCA 500 C	(f)	427	1971 Ford	1.38	2.43	0.27

Each test vehicle in the fleet met the 1971 emission standards of 2.2 grams per mile hydrocarbons, 23 grams per mile carbon monoxide, and 4 grams per mile nitrogen oxides.

The emission results on liquified petroleum gas also meet the 1974-model year standards and, therefore, meet the emission requirements of Section 8657 of the Revenue and Taxation Code.

Based on the test data and other information submitted by the applicant, the staff finds that the Algas Industries emission control system, to be used on vehicles modified to use liquified petroleum gas, meet California requirements for the 1966-1971 model years. The staff, therefore, recommends adoption of Resolution 71-29.

State of California

AIR RESOURCES BOARD

Resolution 71-29

April 21, 1971

WHEREAS, in 1969, the California Legislature added Section 39052(q), Section 39110 and Section 39111 to the Health and Safety Code requiring the Air Resources Board to adopt regulations specifying the manner in which motor vehicles modified or altered to use fuels other than gasoline or diesel be emission tested; and

WHEREAS, on November 9, 1969, the Air Resources Board adopted, "California Exhaust Emission Standards and Test Procedures for Motor Vehicles Modified to Use Liquefied Petroleum Gas or Natural Gas Fuel;" and

WHEREAS, Algas Industries, Inc., has submitted an application and all test data for approval of its emission control system for vehicles modified to utilize liquefied petroleum Gas (LPG); and

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Article 7,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080 of the Health and Safety Code,

Issue this resolution of approval for Algas Industries' carburetor model listed below for use in California on vehicles of the 1966-1971 model years utilizing liquefied petroleum gas with engine sizes as listed,

<u>Carburetor Model</u>	<u>Engine Size Class</u>	<u>Engine Size Displacement Cubic Inches</u>
PCA 500 C	(e), (f)	Over 300

State of California

AIR RESOURCES BOARD

Resolution 71-29-A

April 21, 1971

WHEREAS, in 1970, the California Legislature added Section 8657 to the California Revenue and Taxation Code which states that no motor fuel tax shall be imposed upon motor vehicles modified to use liquified petroleum gas or natural gas and approved by the State Air Resources Board as meeting the emission standards set forth in subdivisions (a) and (b) of Section 39102 and Section 9102.5 of the Health and Safety Code; and

WHEREAS, the Air Resources Board has adopted Resolution 71-29 which approved the Algas Industries, Inc. modification system for converting gasoline engines to use liquified petroleum gas; and

WHEREAS, the Board found that the system complied with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Article 7,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Find that Algas Industries' carburetor model listed below utilizing liquified petroleum gas (LPG) will meet the emission requirements of Section 8657 of the Revenue and Taxation Code for 1966-1971-model gasoline-powered vehicles under 6,000 pounds gross vehicle weight:

<u>Carburetor Model</u>	<u>Engine Size Class</u>	<u>Engine Size Displacement Cubic Inches</u>
PCA 500C	(e), (f)	Over 300

State of California  
AIR RESOURCES BOARD

Resolution 71-29-B

July 21, 1971

WHEREAS, in 1970, the California Legislature added Section 8657 to the California Revenue and Taxation Code which states that no motor fuel tax shall be imposed upon motor vehicles modified to use liquified petroleum gas or natural gas and approved by the State Air Resources Board as meeting the emission standards set forth in subdivisions (a) and (b) of Section 39102 and Section 9102.5 of the Health and Safety Code; and

WHEREAS, the Air Resources Board has approved the Algas Industries, Inc. modification system for converting gasoline engines to use liquified petroleum gas; and

WHEREAS, the Board found that the system complied with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Article 7,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Find that Algas Industries' carburetor model listed below utilizing liquified petroleum gas (LPG) will meet the emission requirements of Section 8657 of the Revenue and Taxation Code for gasoline-powered vehicles under 6,001 pounds gross vehicle weight:

<u>Carburetor Model</u>	<u>Engine Size Class</u>	<u>Engine Size Displacement Cubic Inches</u>
PCA 500C	(a), (f)	Over 300

State of California

AIR RESOURCES BOARD

Staff Report

Exhaust Emission Control System Approval (Forklifts)

Toyota Motor Distributors

May 19, 1971

Toyota Motor Distributors has submitted an application containing all the test data required by the "California Exhaust Emission Control Test Procedure for Portable and Mobile Internal Combustion Engines (forklifts) Used Inside Buildings."

The applicant's exhaust emission control system is an engine-modification system applicable to new engines only.

Emission Data of Each Test Engine Projected  
to 1,500 Hours

<u>Engine No.</u>	<u>Engine Size Cubic Inches</u>	<u>Carburetor</u>	<u>CO% Emissions</u>
5R-1200147	121.7	Nippon-Model RU10	0.9
5R-1200148	121.7	"	0.8
5R-1200149	121.7	"	0.7
5R-1200150	121.7	"	0.8

Each test engine in the approval fleet met the emission standard of 2.0% carbon monoxide.

Based on the test data and other information submitted by the applicant, the staff finds that the Toyota Motor Distributors' exhaust emission control system meets the California requirements for new engines only. The staff, therefore, recommends adoption of Resolution 71-30.

State of California

AIR RESOURCES BOARD

Resolution 71-30

May 19, 1971

WHEREAS, Toyota Motor Distributors submitted an application and all test data for California approval of an exhaust emission control system for portable and mobile internal combustion engines (forklifts) used inside buildings; and

WHEREAS, the applicant's exhaust emission control system is described as an engine-modification type system with the following major elements:

- 1) modified carburetor and leaner mixture,
- 2) specially matched intake manifold,
- 3) recommended maintenance.

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Article 5,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, Division 26 of the Health and Safety Code,

Issue a certificate of approval to Toyota Motor Distributors with respect to its exhaust emission control system for new portable and mobile internal combustion engines of the following engine size class:

Engine Size Class

Engine Size Displacement

A3

100-140 cubic inches



STATE OF CALIFORNIA

AIR RESOURCES BOARD

RESOLUTION 71-31

May 19, 1971

WHEREAS, Section 39296 of the Health and Safety Code prohibits use of open fires for the purpose of disposal of petroleum wastes, demolition debris, tires, tar, trees, wood waste, or other combustible or flammable solid or liquid waste, or for metal salvage or burning of automobile bodies after December 31, 1971; and

WHEREAS, Section 39297.4 of the Health and Safety Code directs the Air Resources Board to permit a city, city and county, or county to use open outdoor fires for a limited time only, in its operation of a solid waste dump, upon the finding that because of sparse population in the geographical area and economic and technical difficulties, the solid waste dump should be so operated; and

WHEREAS, there are approximately three hundred and seventy nine city and county dumps using open burning as a means of solid waste disposal;

NOW, THEREFORE, BE IT RESOLVED, That the Air Resources Board's policy for allowing limited time extensions to cities and counties to continue to use open fires for the purpose of disposal of solid waste is:

Cities and counties wishing to operate their open burning dumps beyond the December 31, 1971 deadline shall apply to the Board for permission before November 1, 1971. The application shall be in a form of a resolution from the city council or county board of supervisors, and shall be accompanied with information on:

1. Geographical location of each open burning dump and population density within a ten mile radius.
2. Number of people and area that each open burning dump serves.
3. Amount of waste disposed of at each open burning dump.
4. Unavailability of other methods of disposal.
5. A plan and timetable to phase out each open burning dump.

State of California

AIR RESOURCES BOARD

Resolution 71- 32

WHEREAS, the State Highway Commission has allocated to the Air Resources Board the sum of \$125,000 for use in evaluating the emissions from internal combustion engine sources presently exempt from emission control regulations, and also to investigate the technical and economic feasibility of imposing emission control regulations to these sources; and,

NOW, THEREFORE, BE IT RESOLVED, that this Board authorizes the Executive Officer to execute an Interagency Agreement with the Department of Public Works to accept these funds and authorizes him to utilize such funds for the purposes stated above.

May 19, 1971

*June 2 - mail Ballat*

State of California

AIR RESOURCES BOARD

Resolution 71-33

May 19, 1971

WHEREAS, the Anti-Irritant Gasoline Combustion Research and Development, 1238 S. Parton, Santa Ana, California, has applied for two (2) permits for the testing of an experimental motor vehicle pollution control device for approval by this Board; and

WHEREAS, the device comprises a modified carburetion system for vehicles using an electronic flow control plus steam injection; and

WHEREAS, Section 39181 of the Health and Safety Code, authorizes the Board to issue such permits,

NOW, THEREFORE, BE IT RESOLVED, That the Anti-Irritant Gasoline Combustion Research and Development is hereby granted two (2) permits for testing an experimental control device for a period of one year from this date.

2.--If a dump serves less than 5000 people and receives less than 5 tons of waste per day, it may be deemed as economically not feasible to be phased out in less than a year.

3.--Limited time extension shall be not more than:

- (a) Six months for dumps handling more than 5 tons per day or serving more than 5000 persons and located in a geographical area of sparse population.
- (b) One year for dumps handling less than 5 tons per day but located in counties with populations of more than 10,000 people and located in a geographical area of sparse population.
- (c) Two years for dumps handling less than 5 tons per day, located in counties with populations of less than 10,000 people, and located in a geographical area of sparse population.--Additional time extensions or a year-by-year bases may be authorized by the Board if the above conditions are continued to be met.

STATE OF CALIFORNIA

AIR RESOURCES BOARD

RESOLUTION 71-34

May 19, 1971

WHEREAS, Section 24350.3 of the Health and Safety Code provides that each of the Boards of Supervisors of the Counties of Solano, Napa, and Sonoma may adopt a resolution declaring that a portion of their county is in an air basin other than the air basin presently under the jurisdiction of the Bay Area Air Pollution Control District.

WHEREAS, that section of the Health and Safety Code further states that the resolution adopted shall declare that it is in the interest of that County to include such territory within an air pollution control district that could effectively control air pollution in that territory and shall be presented to the State Air Resources Board for its approval.

WHEREAS, on January 5, 1971, the Board of Supervisors of the County of Solano, California adopted a resolution declaring that a portion of the County to be in an air basin other than the Bay Area Air Basin.

WHEREAS, on May 11, 1971, the Solano County Board of Supervisors adopted a resolution which contained the attached description of the dividing line between the portion of the County to be in the Bay Area Air Basin and the portion to be outside of that Basin.

WHEREAS, the resolutions adopted by the Solano Board of Supervisors have been submitted to the Air Resources Board for approval.

NOW, THEREFORE, BE IT RESOLVED, that the Board approves the attached description of the line proposed by the Solano County Board of Supervisors.

DESCRIPTION OF DIVISION LINE BETWEEN NORTHEAST PORTION  
OF SOLANO COUNTY AND BAY AREA AIR POLLUTION CONTROL DISTRICT

Beginning at the intersection of the westerly boundary of Solano County and the 1/4 section line running east and west through the center of Section 34, T6N, R2W, M.D.B. & M., thence east along said 1/4 section line to the east boundary of Section 36, T6N, R2W., M.D.B. & M., thence south 1/2 mile and east 2.0 miles, more or less, along the west and south boundary of Los Putos Rancho to the northwest corner of Section 4, T5N, R1W., M.D.B. & M., thence east along the north line of Section 4, 3, 2, and 1 about 4 miles to the northwest corner of Section 6, T5N, R1E, M.D.B. & M., thence east along the north line of Sections 6, 5, 4, and 3, about 4 miles to the northeast corner of Section 3, T5N, R1E, M.D.B. & M., thence south 14 miles to the southwest corner of Section 11, T3N, R1E, thence east along the south line of Section 11 about 7 miles to the boundary line between Solano and Sacramento Counties.

State of California

AIR RESOURCES BOARD

Resolution 71-34b

June 16, 1971

WHEREAS, the change in the air basin boundaries in Solano County is to be effective as of July 1, 1971 in conformance with the provisions of Section 24350.3 of the Health and Safety Code;

NOW, THEREFORE, BE IT RESOLVED, that the following finding of emergency be adopted:

FINDING OF EMERGENCY

The Air Resources Board finds that an emergency exists and that the foregoing regulations insofar as they relate to air basin boundary changes in the County of Solano (viz, Sections 60101(c) and 60106(o) of Title 17 of the California Administrative Code) are necessary for the immediate preservation of the public peace, health and safety and general welfare. A statement of the facts constituting such an emergency is that the change in air basin boundaries in the County of Solano must take place on July 1, 1971 in conformance with the provisions of Section 24350.3 of the Health and Safety Code.

The said regulations are therefore adopted as emergency regulations to take effect on July 1, 1971 as provided in Section 11422(c) of the Government Code.

STATE OF CALIFORNIA

AIR RESOURCES BOARD

RESOLUTION 71-35

May 19, 1971

WHEREAS, Section 24350.3 of the Health and Safety Code provides that each of the Boards of Supervisors of the Counties of Solano, Napa, and Sonoma may adopt a resolution declaring that a portion of their county is in an air basin other than the air basin presently under the jurisdiction of the Bay Area Air Pollution Control District.

WHEREAS, that section of the Health and Safety Code also states that the resolution adopted shall declare that it is in the interest of that County to include such territory within an air pollution control district that could effectively control air pollution in that territory and shall be presented to the State Air Resources Board for its approval.

WHEREAS, on January 13, 1971, the Board of Supervisors of the County of Sonoma, adopted a resolution declaring that a portion of Sonoma County is in an air basin other than the Bay Area Air Basin.

WHEREAS, the Board of Supervisors of the County of Sonoma submitted to the Board for approval the attached description of the line separating the northerly portion of Sonoma County from the Bay Area Air Basin.

NOW, THEREFORE, BE IT RESOLVED, that the Board approves the attached description of the line proposed by the Sonoma County Board of Supervisors.



DESCRIPTION OF DIVISION LINE BETWEEN  
NORTHERLY PORTION OF SONOMA COUNTY AND BAY AREA  
AIR POLLUTION CONTROL DISTRICT

Beginning at the southeasterly corner of the Rancho Estero Americano, being on the boundary line between Marin and Sonoma Counties, California; thence running northerly along the easterly boundary line of said Rancho Estero Americano to the northeasterly corner thereof, being an angle corner in the westerly boundary line of Rancho Canada de Jonive; thence running along said boundary of Rancho Canada de Jonive westerly, northerly and easterly to its intersection with the easterly line of Graton Road; thence running along the easterly and southerly line of Graton Road, northerly and easterly to its intersection with the easterly line of Sullivan Road; thence running northerly along said easterly line of Sullivan Road to the southerly line of Green Valley Road; thence running easterly along the said southerly line of Green Valley Road and easterly along the southerly line of State Highway 116, to the westerly line of Vine Hill Road; thence running along the westerly and northerly line of Vine Hill Road, northerly and easterly to its intersection with the westerly line of Laguna Road; thence running northerly along the westerly line of Laguna Road and the northerly projection thereof to the northerly line of Trenton Road; thence running westerly along the northerly line of said Trenton Road to the easterly line of Trenton-Healdsburg Road; thence running northerly along said easterly line of Trenton-Healdsburg Road to the easterly line of Eastside Road; thence running northerly along said easterly line of Eastside Road to its intersection with the southerly line of Rancho Sotoyome; thence running

State of California

AIR RESOURCES BOARD

Resolution 71-35b

June 16, 1971

WHEREAS, the changes in the air basin boundary in Sonoma County is to be effective as of July 1, 1971 in conformance with the provisions of Section 24350.3 of the Health and Safety Code;

NOW, THEREFORE, BE IT RESOLVED, that the following finding of emergency be adopted:

FINDING OF EMERGENCY

The Air Resources Board finds that an emergency exists and that the foregoing regulations insofar as they relate to air basin boundary changes in the County of Sonoma (viz, Sections 60100(f), 60101(c), and 60106(o) of Title 17 of the California Administrative Code) are necessary for the immediate preservation of the public peace, health and safety and general welfare. A statement of the facts constituting such an emergency is that the change in air basin boundary in the County of Sonoma must take place on July 1, 1971 in conformance with the provisions of Section 24350.3 of the Health and Safety Code.

The said regulation is, therefore, adopted as an emergency regulation to take effect on July 1, 1971 as provided in Section 11422(c) of the Government Code.

State of California

AIR RESOURCES BOARD

Resolution 71-36

LPG and NG Conversion on Heavy-Duty Vehicles

WHEREAS, on March 17, 1971 the Air Resources Board had before it approval of mail ballots on Resolutions 70-9-C, 70-16-C, 70-34-C and 70-68-B regarding approval, pursuant to Section 8657 of the Revenue and Taxation Code, of natural or liquified petroleum gas fuel systems on heavy-duty vehicles;

WHEREAS, action was deferred due to the Attorney General's opinion dated March 5, 1971, that tax exemption under Section 8657 could be given to heavy-duty vehicles;

WHEREAS, by letter dated May 7, 1971, the Attorney General has modified his opinion stating that the tax exemption may be applied to heavy-duty vehicles if they meet the grams-per-mile standards of Subdivisions (a) and (b) of Section 39102 and Section 39102.5 of the Health and Safety Code, but the Board may not use equivalent standards; and

WHEREAS, the pending Resolutions were not based upon a finding that the fuel systems to be approved caused heavy-duty vehicles to meet the emission standards of Subdivisions (a) and (b) of Section 39102 and Section 39102.5.

NOW, THEREFORE, BE IT RESOLVED, that Resolutions 70-9-C, 70-16-C, 70-34-C and 70-68-B not be approved, and the action on the mail ballots on these Resolutions is hereby rescinded.

7-21-71

State of California

AIR RESOURCES BOARD

Staff Report on Tax Exemption for  
Pre-1966 Models Converted to NG or LPG

July 21, 1971

Up to the present time Board resolutions finding eligibility for Section 8657 (Rev. and Tax. Code) tax exemptions have been limited to 1966 and later model light-duty vehicles. This was in part due to the fact that the Board LPG and NG Test Procedure was originally designed to determine that conversion to LPG or NG did not increase the emissions from vehicles having exhaust emissions control devices. The presumption was that the final performance of the converted system was ascribable to some combination of the original emission control system and the conversion components.

At the June Board meeting, Mr. Robert McJones proposed to the Board that the exempt status be extended to also apply to pre-1966 vehicles. His argument was that the critical engine elements of air/fuel ratio and spark timing are altered by the conversion process on older cars in much the same manner as was done on post-1965 models for emissions control. He also cited many emissions tests which he claimed showed no indication that older vehicles have higher emission levels than controlled vehicles, when operating on gaseous fuels. The staff has received a small amount of data showing that some pre-1966 vehicles can meet the 1974 emission standards as required to qualify for tax exemption.

The argument has considerable merit but is not entirely valid. Some changes in post-1966 vehicles undoubtedly do contribute to emissions performance, i.e., air injection, combustion chamber design, spark advance control valves, etc. However, it seems probable that sufficient test vehicles could be found to qualify for the exemption under a procedure comparable to that for 1966 and later model LPG and NG conversions.

It is, therefore, recommended that the Board accept the evidence of compliance on 1966 and later models as also showing compliance on pre-1966 models. The following resolutions are offered which would remove the post-1965 limitations.

This action differs from that previously taken regarding heavy-duty vehicles. The Attorney-General's opinion addressed only the concept of accepting an equivalent degree of control as evidence of compliance with a specific mass emission standard. In this case, there is no question about the applicability of the standard; the only issue is that of evidence acceptable for a finding of compliance.

State of California

AIR RESOURCES BOARD

June 16, 1971

RESOLUTION 71-37

WHEREAS, Chapter 715 of the Statutes of 1970 (Assembly Bill No. 87, Schabaram) directed the Air Resources Board to establish a program for obtaining data on air quality in each air basin and authorized the Board to contract with local or regional agencies for obtaining such data; and

WHEREAS, the Technical Advisory Committee and the Air Resources Board have approved the proposed air monitoring program; and

WHEREAS, the Air Resources Board has available the sum of \$150,000 for contracting with the air pollution control districts for obtaining air monitoring data; and

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board authorizes the Executive Officer to complete administrative procedures and to execute all necessary documents and contracts with air pollution control districts for obtaining air monitoring data, in an amount not to exceed the total sum of \$150,000.

State of California

AIR RESOURCES BOARD

June 16, 1971

AIR MONITORING CONTRACTS

A staff report on air monitoring and on Chapter 715 of the 1970 California Statutes (AB-87, 1970) was presented to the Air Resources Board at its October 21, 1970 meeting. Under the provisions of this Chapter, the Air Resources Board was directed to establish programs for obtaining data on air quality in each air basin and the Board was authorized to contract with local or regional agencies for their data.

The objectives of air monitoring, the criteria upon which the location, distribution, and number of air monitoring stations were to be based, and the conditions for contracting with local agencies were proposed in a report "Proposed State Air Monitoring Network". Meetings were held with representatives of air pollution control districts to discuss the conditions, and the proposal was reviewed by the Technical Advisory Committee. The Board approved the proposal upon the recommendation of the Committee at the February 17, 1971 Board meeting.

Under the proposal, 35 air monitoring stations were to be in the State network. Fifteen of these are stations operated by local or regional air pollution control agencies. During FY 1971-72, the operation of several State stations may be taken over by district under contract.

A draft of a Standard Agreement has been sent to each of the air pollution control districts that have an air monitoring station in the State network. The districts have in general indicated that they are satisfied with the terms specified in the drafts of the Standard Agreement.

A sample Agreement is in the Board folder. Resolution 71-37, if approved by the Air Resources Board, authorizes the Executive Officer to sign the Agreements.

The air pollution control districts that have stations in the State network are tabulated below. Payment for the data obtained in FY 1971-72 is not to exceed \$10,000 per station.

<u>AIR BASIN</u>	<u>AIR POLLUTION CONTROL DISTRICT</u>	<u>NO. OF STATIONS</u>
South Coast	Los Angeles County	4
	Orange County	2
	Riverside County	1
	San Bernardino County	1
	Ventura County	1
San Francisco Bay Area	Bay Area	2 (may be increased to 5)
San Diego	San Diego County	2
Southeast Desert	Riverside	1
North Central Coast	Monterey-Santa Cruz Unified	1

State of California

AIR RESOURCES BOARD

Resolution 71-38

June 16, 1971

WHEREAS, Sections 60100(f) and 60105(c) of Title 17 of the California Administrative Code divide Siskiyou County into the North Coast Air Basin and the Northeast Plateau Air Basin;

WHEREAS, Section 39051 of the Health and Safety Code directs the ARB to divide the State into basins based on meteorological and geographical conditions and with consideration for political boundary lines wherever practicable;

WHEREAS, on March 10, 1971, the Board of Supervisors of the County of Siskiyou adopted a resolution requesting the ARB to designate that all of Siskiyou County be in one air basin;

WHEREAS, a financial burden will be placed upon the County of Siskiyou to provide representation on Basinwide Air Pollution Control Coordinating Councils for two air basins and its next fiscal budget must be adopted in the next few days; and

WHEREAS, there are no compelling meteorological or geographical reasons why Siskiyou County should not entirely be in the Northeast Plateau Basin;

NOW, THEREFORE, BE IT RESOLVED, that in Title 17, of the California Administrative Code, Subsection (f) be stricken from Section 60100 and that Subsection (c) of Section 60105 be amended to read, "(c) All of Siskiyou County."

and, BE IT FURTHER RESOLVED, that the State Air Resources Board finds that an emergency exists and that the foregoing amendments to regulations deleting Siskiyou County from Section 60100 and including all of Siskiyou County in Subsection (c) of Section 60105 are necessary for the immediate preservation of the public peace, health and safety or general welfare. A statement of the facts constituting such emergency is:

A financial burden will be placed upon the County of Siskiyou to provide representation on Basinwide Air Pollution Control Coordinating Councils for two air basins and its next fiscal budget must be adopted in the next few days; and

*July 1, 1971*  
The said amendments are therefore adopted as emergency regulations, to take effect ~~immediately~~ upon filing with the Secretary of State as provided in Section 11422(c) of the Government Code.



State of California

AIR RESOURCES BOARD

Resolution 71-38A

July 21, 1971

WHEREAS, Resolution 71-38, which changes the boundaries of the North Coast and Northeast Plateau Air Basins in Siskiyou County, was adopted on June 16, 1971 as an emergency regulation; and

WHEREAS, on July 21, 1971 the Air Resources Board held a public hearing on the boundary changes pursuant to law;

NOW, THEREFORE, BE IT RESOLVED, that after the public hearing as required by law, Resolution 71-38, amending Subsection (f) of Section 60100 and Subsection (c) of Section 60105 of Title 17 of the California Administrative Code, is hereby confirmed.

State of California

AIR RESOURCES BOARD

RESOLUTION 71-39

June 16, 1971

WHEREAS, the State Department of Public Works, Division of Highways has allocated to the Air Resources Board the sum of \$25,000 for use in providing assistance on the problems of air pollution as it relates to planning, construction, operation, and maintenance of the State Highway System.

NOW, THEREFORE, BE IT RESOLVED, that this Board authorizes the Executive Officer to execute an interagency agreement with the Department of Public Works to accept these funds and authorizes him to utilize such funds for the purposes stated above.

State of California

AIR RESOURCES BOARD

Resolution 71-40

June 16, 1971

WHEREAS, the Division of Highways of the State of California, P. O. Box 9067, Sacramento, 95816, has applied for twelve (12) permits for the testing of an experimental motor vehicle pollution control device for approval by this Board; and

WHEREAS, the device comprises a weight loaded crankcase emission control valve, a filter, and a container for trapping liquids in the blowby gas; and

WHEREAS, Section 39181 of the Health and Safety Code, authorizes the Board to issue such permits;

NOW, THEREFORE, BE IT RESOLVED, that the Division of Highways is hereby granted twelve (12) permits for testing an experimental motor vehicle pollution control device for a period of one year from this date.

*To be brought up again at June meeting*

STATE OF CALIFORNIA

AIR RESOURCES BOARD

RESOLUTION 71-41

June 16, 1971

WHEREAS, Section 39296 of the Health and Safety Code prohibits use of open fires for the purpose of disposal of petroleum wastes, demolition debris, tires, tar, trees, wood waste, or other combustible or flammable solid or liquid waste; or for metal salvage or burning of automobile bodies after December 31, 1971; and

WHEREAS, Section 39297.4 of the Health and Safety Code directs the Air Resources Board to permit a city, city and county, or county to use open outdoor fires for a limited time only, in its operation of a solid waste dump, upon the finding that because of sparse population in the geographical area and economic and technical difficulties, the solid waste dump should be so operated; and

WHEREAS, there are approximately three hundred and seventy-nine city and county dumps using open burning as a means of solid waste disposal; and

WHEREAS, the Board at its May 19, 1971 meeting adopted guidelines for receiving applications from cities and counties for permission to continue their open burning dumps;

NOW, THEREFORE, BE IT RESOLVED, That the Air Resources Board's policy for approving requests for limited time extensions to cities and counties to continue to use open fires for the purpose of disposal of solid waste is:

1. If the open burning dump is in a location where the population density is less than 20 people per square mile within a 10 mile radius, it shall be considered to be in a sparsely populated area.
2. If a dump serves less than 5,000 people and receives less than 5 tons of waste per day, it may be deemed as economically not feasible to be phased out in less than a year.
3. Limited time extension shall be not more than:
  - (a) Six months for dumps handling more than 5 tons per day or serving more than 5,000 persons and located in a geographical area of sparse population.

State of California

AIR RESOURCES BOARD

Resolution 71-42

June 16, 1971

WHEREAS, Chemical Associates of California, 7773 St. Bernard Street No. 4, Playa del Rey, California 90291, has applied for a permit for the testing of an experimental motor vehicle pollution control device for approval by this Board; and

WHEREAS, the device consists of engine modifications in conjunction with chemical additives, and

WHEREAS, Section 39181 of the Health and Safety Code authorizes the Board to issue such permits,

NOW, THEREFORE, BE IT RESOLVED, That Chemical Associates of California is hereby granted a permit for operating the test vehicle with engine modifications for a period of one year from this date.

State of California  
AIR RESOURCES BOARD

Resolution 71-43

June 16, 1971

WHEREAS, Sections 39052.5 and 39052.6 in the "Pure Air Act of 1968" authorize the State Air Resources Board to establish more stringent standards for emissions from new motor vehicles; and

WHEREAS, Section 39052(k) requires the Air Resources Board to adopt test procedures specifying the manner in which new motor vehicles shall be approved; and

WHEREAS, a public hearing and other proceedings have been held in accordance with the provisions of the Administrative Procedure Act (Government Code, Title 2, Division 3, Part 1, Chapter 4.5);

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board hereby adopts regulations in Title 13, Chapter 3, California Administrative Code, as follows:

Adds Section 1951 to read:

1951. Fuel evaporative emissions. The Board finds compliance with the following standard for fuel evaporative emissions of hydrocarbons to be necessary and technologically feasible for 1973 model year gasoline-powered motor vehicles 6,001 pounds gross vehicle weight and over. In accordance with this finding, the standards for such vehicles is:

Fuel evaporative emission controls for new heavy-duty gasoline-powered vehicles subject to this regulation shall provide substantially the same degree of control as for light-duty vehicles (2 grams per test as specified in the Federal Register, Volume 35, Number 219 P 17291, Section 85.22, November 10, 1970).

Adds Section 2509 to read:

2509. Test procedures. The test procedures for determining compliance with the fuel evaporative losses specified in Section 1951 are "California Fuel Evaporative Emission Standards and Approval Procedures for 1973 and Subsequent Model Year Gasoline-Powered Motor Vehicles over 6,001 Pounds Gross Vehicle Weight", dated June 16, 1971.

And BE IT FURTHER RESOLVED that the test procedures entitled "California Fuel Evaporative Emission Standards and Approval Procedures for 1973 and Subsequent Model Year Gasoline-Powered Motor Vehicles over 6,001 Pounds Gross Vehicle Weight" are hereby adopted.

State of California

AIR RESOURCES BOARD

Resolution 71-44

June 16, 1971

WHEREAS, Kar Products Inc., 1336 Seventh Street, Berkeley, California, 94710 has applied for fourteen (14) permits for the testing of an experimental motor vehicle pollution control device; and

WHEREAS, the device consists of a crankcase emission control system which incorporates a weight-loaded flow control valve, a filter and a reservoir for collecting liquid droplets; and

WHEREAS, Section 39181 of the Health and Safety Code authorizes the Board to issue such permits,

NOW, THEREFORE, BE IT RESOLVED, that Kar Products is hereby granted fourteen (14) permits for testing an experimental motor vehicle pollution control device for a period of one year from this date.

STATE OF CALIFORNIA

AIR RESOURCES BOARD

Resolution 71- 45  
June 16, 1971

WHEREAS, the Legislature in 70 Statutes, Chapter 1579 (AB#16), has indicated a need for statewide agricultural burning notices, and

WHEREAS, competent staffs, qualified to issue these burning notices already exist in the air pollution control districts in the South Coast Air Basin and in the San Francisco Bay Area Air Basin, and

WHEREAS, it would be advantageous to the State to have each of the existing staffs in these two basins issue the burning notices within their respective basins,

THEREFORE, BE IT RESOLVED, that the Air Resources Board authorizes the Executive Officer to negotiate and execute contracts with the air pollution control districts in the South Coast Air Basin and the San Francisco Bay Area Air Basin in an amount not to exceed \$30,000, for the purpose of issuing burning notices.



State of California

AIR RESOURCES BOARD

1972 Emission Control System Approval

Mitsubishi Motors Corporation

July 21, 1971

Mitsubishi Motors Corporation has submitted a complete application for 1972-model year approval of its exhaust emission control system for its Colt vehicles. The applicant elected to qualify these vehicles for meeting the 1972 exhaust emission standards by the optional test procedure.

The applicant's exhaust emission control system is of the engine-modification type.

Projected Emissions of Each Test Vehicle

Engine Family Identification	Engine Size Cubic Inches	Vehicle Number	Projected Exhaust Emissions at 50,000 Miles		
			HC-gms/ml	CO-gms/ml	NO <sub>2</sub> -gms/ml
4C35EM-01	97.5	A53-9100894	1.62	21.3	2.14
4C35EM-01	97.5	A53-5100859	2.10*	25.1*	2.13**

\*E.P.A. data

\*\*Moriba data

Each test vehicle met the 1972-model year emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide and 3.2 grams per mile oxides of nitrogen.

Mitsubishi also states in its application that the engine and transmission combination of the vehicles for which approval is requested have been designed to operate with 91 Research Octane Number fuel and that no adverse driveability effect will result from the use of such fuel.

Based on the test data and other information submitted by the applicant, the staff finds that Mitsubishi Motors Corporation exhaust emission control system meets California requirements for vehicles under 6,000 pounds gross vehicle weight for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-46.

State of California

AIR RESOURCES BOARD

Resolution 71-46

July 21, 1971

WHEREAS, Mitsubishi Motors Corporation, Japan, submitted an application and all required test data for approval of its emission control system for its 1972-model vehicles; and

WHEREAS, the applicant's exhaust control system is described as follows:

Engine-modification system with major elements:

- (1) throttle positioner and governor switch,
- (2) carburetor with specified flow rates,
- (3) modified fast idle cam,
- (4) intake air temperature regulator,
- (5) distributor with specified advance characteristics,
- (6) modified valve timing overlap,
- (7) recommended maintenance.

WHEREAS, the Board finds that the systems comply with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Article 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Issue a resolution of approval to Mitsubishi Motors Corporation with respect to its 1972-model vehicles, 6,000 pounds or less gross vehicle weight, of the engine families listed below:

<u>Engine Family Identification</u>	<u>Engine Size Cubic Inches</u>	<u>Vehicle Model</u>
4G35EM-01	97.5	Colt

State of California

AIR RESOURCES BOARD

Resolution 71-47

August, 1971

WHEREAS, General Motors Corporation submitted an application and all required test data for approval of its exhaust emission control system for its 1972-model vehicles;

WHEREAS, the applicant's exhaust control system is described as follows:

An air-injection type exhaust emission control system called "A.I.R." (including NO<sub>x</sub> control) with major elements:

- (1) air pump with air injection into the exhaust ports,
- (2) carburetor with specified flow rates,
- (3) distributor with specified advance characteristics,
- (4) transmission controlled spark advance valve,
- (5) recommended maintenance, and

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 18, Chapter 3, Subchapter 1 and Subchapter 2, Article 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Issue a resolution of approval to General Motors Corporation with respect to its 1972-model vehicles, 6,000 pounds or less gross vehicle weight, of the engine family listed below:

Engine Family GM-102

Engine Size - 250 cubic inches

Chevrolet Division:

Nova, Camaro, Chevelle, Malibu, El Camino, El Camino Custom,  
Nomad, Greenbriar, Concours, Chevy Van, Beauville, Rally Wagon,  
Van Dura Blazer, Conventional, Suburban, Step Van

Pontiac Division:

Le Mans, Le Mans Wagon, Firebird, Ventura II

State of California  
AIR RESOURCES BOARD

Staff Report

1972 Emission Control System Approval  
General Motors Corporation

December 15, 1971

This staff report is a supplement to the original staff report dated August 1971. General Motors Corporation informed the staff that the Pontiac Ventura II was incorrectly listed under Engine Family GM 104 in Resolution 71-47-A. The staff recommends the adoption of Resolution 71-47-D which correctly lists the Pontiac Ventura II under Engine Family GM 103. The staff further recommends that Resolution 71-47-A be rescinded concurrent with the adoption of Resolution 71-47-D.

State of California  
AIR RESOURCES BOARD

Resolution 71-47-D

December 15, 1971

WHEREAS, General Motors Corporation submitted an application and all required test data for approval of its exhaust emission control system for its 1972-model GM-103 and GM-104 engine family vehicles;

WHEREAS, the applicant's exhaust control system is described as follows:

An air-injection type exhaust emission control system called "A.I.R." (including NOx control) with major elements:

- (1) air pump with air injection into the exhaust ports,
- (2) carburetor with specified flow rates,
- (3) distributor with specified advance characteristics,
- (4) transmission controlled spark advance valve,
- (5) recommended maintenance, and

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Article 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080 of the Health and Safety Code,

Rescind previously adopted Resolution 71-47-A; and

Approve the exhaust emission control device of General Motors Corporation for its 1972-model vehicles, 6,000 pounds or less gross vehicle weight, of the engine families listed below:

Engine family GM-103  
Engine Size - 307 cubic inches

Chevrolet Division

Nova, Camaro, Chevelle, Malibu, El Camino  
El Camino Custom, Nomad, Greenbriar, Concours,  
Chevy Van, Beauville, Sportvan, Blazer,  
Conventional Truck, Suburban/Carryall.

Resolution 71-47-D

December 15, 1971

GMC Division:

Van Dura, Rally Wagon, STX, Jimmy  
Sprint.

Pontiac Division:

Ventura II

Engine Family GM-104

Engine Size - 350 cubic inches

Chevrolet Division

Nova, Camaro, Chevelle, Malibu,  
El Camino, El Camino Custom, Nomad  
Greenbriar, Concours, Concours  
Estate Wagon, Monte Carlo, Biscayne,  
Bel Air Impala, Impala Custom,  
Brookwood, Townsman, Kingswood,  
Corvette, Chevy Van, Sportvan,  
Beauville Sportvan, Blazer,  
Conventional Truck, Suburban/Carryall.

GMC Division

Van Dura, Rally Wagon, STX, Jimmy, Sprint

Engine Size - 400 cubic inches

Chevrolet Division:

Biscayne, Bel Air, Impala, Impala  
Custom, Caprice, Brookwood, Townsman,  
Kingswood Estate.

State of California

AIR RESOURCES BOARD

Resolution 71-47E

January 19, 1972

WHEREAS, General Motors Corporation submitted an application and all required test data for approval of the exhaust emission control system for its 1972-model GM-701 engine family vehicles;

WHEREAS, the applicant's exhaust control system is described as an Air-Injection type (including NO<sub>x</sub> control) with major elements:

- (1) air pump with air injection into the exhaust ports,
- (2) carburetor with specified flow rates,
- (3) distributor with specified advance characteristics,
- (4) recommended maintenance; and

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Article 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Approve the exhaust emission control system of General Motors Corporation for its 1972-model vehicles, 6,000 pounds or less gross vehicle weight, of the engine family listed below:

Engine Family GM-701

Engine Size - 139 cubic inches

Vauxhall Motors Ltd. Division:

Firenza Manual-4, Firenza Automatic-3

State of California

AIR RESOURCES BOARD

Staff Report

1972 Emission Control System Approval

General Motors Corporation

August, 1971

General Motors Corporation has submitted a complete application for 1972-model year approval of its exhaust emission control system for its G14-102 engine family vehicles. The applicant tested these vehicles and met the 1972 exhaust emission standards using the optional test procedure.

The applicant's exhaust emission control system is of the air-injection type.

Projected Emissions of Each Test Vehicle

<u>Engine Family Identification</u>	<u>Engine Size Cubic Inches</u>	<u>Vehicle Number</u>	<u>Projected Exhaust Emissions at 50,000 Miles</u>		
			<u>HC-gms/mile</u>	<u>CO-gms/mile</u>	<u>NO<sub>2</sub>-gms/mile</u>
G14-102	250	G1345R	1.8*	15*	2.6
G14-102	250	K1288R	2.0*	30*	3.1

\*Environmental Protection Agency data

Each test vehicle met the 1972-model year emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide and 3.2 grams per mile oxides of nitrogen.

Based on the test data and other information submitted by the applicant, the staff finds that General Motors Corporation exhaust emission control system meets California requirements for vehicles under 6,000 pounds gross vehicle weight for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-47.



State of California  
AIR RESOURCES BOARD

Resolution 71-47-A

August, 1971

WHEREAS, General Motors Corporation submitted an application and all required test data for approval of its exhaust emission control system for its 1972-model GM-103 and GM-104 engine family vehicles;

WHEREAS, the applicant's exhaust control system is described as follows:

An air-injection type exhaust emission control system called  
"A.I.R." (including NO<sub>x</sub> control) with major elements:

- (1) air pump with air injection into the exhaust ports,
- (2) carburetor with specified flow rates,
- (3) distributor with specified advance characteristics,
- (4) transmission controlled spark advance valve,
- (5) recommended maintenance, and

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Article 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Issue a resolution of approval to General Motors Corporation with respect to its 1972-model vehicles, 6,000 pounds or less gross vehicle weight, of the engine family listed below:

Engine family GM-103

Engine Size - 307 cubic inches

Chevrolet Division

Nova, Camaro, Chevelle, Malibu, El Camino  
El Camino Custom, Nomad, Greenbriar, Concours,  
Chevy Van, Beauville, Sportvan, Blazer,  
Conventional Truck, Suburban/Carryall.

State of California

AIR RESOURCES BOARD

Resolution 71-47-B

August, 1971

WHEREAS, General Motors Corporation submitted an application and all required test data for approval of its exhaust emission control system for its 1972-model GM-101 engine family vehicles;

WHEREAS, the applicant's exhaust control system is described as follows:

An air-injection type exhaust emission control system called "A.I.R." (including NO<sub>x</sub> control) with major elements:

- (1) air pump with air injection into the exhaust ports,
- (2) carburetor with specified flow rates,
- (3) distributor with specified advance characteristics,
- (4) transmission controlled spark advance valve, (manual only)
- (5) recommended maintenance, and

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Article 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Issue a resolution of approval to General Motors Corporation with respect to its 1972-model vehicles, 6,000 pounds or less gross vehicle weight, of the engine family listed below:

Engine family GM-101

Engine Size - 140 cubic inches

Chevrolet Division

Vega 2300, Vega 2300 Sedan, Vega 2300 Coupe,

Vega 2300 Panel Express, Vega 2300 Kammback Wagon

State of California

AIR RESOURCES BOARD

Staff Report

1972 Emission Control System Approval

General Motors Corporation

August, 1971

General Motors Corporation has submitted a complete application for 1972-model year approval of its exhaust emission control system for its GM-101 engine family vehicles. The applicant tested these vehicles and met the 1972 exhaust emission standards using the optional test procedure.

The applicant's exhaust emission control system is of the air-injection type.

Projected Emissions of Each Test Vehicle

Engine Family Identification	Engine Size Cubic Inches	Vehicle Number	Projected Exhaust Emissions at 50,000 Miles		
			HC-gms/mi.	CO-gms/mi.	NO <sub>2</sub> -gms/mi.
GM-101	140	15263	2.5*	22.0*	2.6
GM-101	140	15262	1.3*	16.2*	2.8

\*Environmental Protection Agency Data

Each test vehicle met the 1972-model year emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide and 3.2 grams per mile oxides of nitrogen.

Based on the test data and other information submitted by the applicant, the staff finds that General Motors Corporation exhaust emission control system for its GM-101 engine family vehicles meets California requirements for vehicles under 6,000 pounds gross vehicle weight for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-47-B.

State of California

AIR RESOURCES BOARD

Resolution 71-47-C

August, 1971

WHEREAS, General Motors Corporation submitted an application and all required test data for approval of its exhaust emission control system for its 1972-model GM-201, GM-202, GM-301, GM-302, GM-401, GM-402, GM-501 and GM-601 engine family vehicles.

WHEREAS, the applicant's exhaust emission control systems are described as follows:

- A. An air-injection type of exhaust emission control system called "AIR" (including NO<sub>x</sub> control) with major elements for GM-501 engine family vehicles.
  - (1) air pump with air injection into the exhaust ports,
  - (2) carburetor with specified flow rates,
  - (3) distributor with specified advance characteristics,
  - (4) vehicle speed controlled spark advance,
  - (5) recommended maintenance.
- B. An air-injection and exhaust gas recycle type of exhaust emission control system called "AIR-EGR" (including NO<sub>x</sub> control) with major elements for GM-401 and GM-402 engine family vehicles:
  - (1) air pump with air injection into the exhaust ports,
  - (2) exhaust gas recycle,
  - (3) carburetor with specified flow rates,
  - (4) distributor with specified advance characteristics,
  - (5) transmission controlled spark advance,
  - (6) recommended maintenance.
- C. An engine-modification type of exhaust emission control system called "CCS" (including NO<sub>x</sub> control) with major elements for GM-201, GM-202, GM-301, GM-302 engine family vehicles, and called "OECS" for GM-601 engine family vehicles:
  - (1) carburetor with specified flow rates,
  - (2) distributor with specified advance characteristics,
  - (3) vehicle speed controlled spark advance (GM-201 and GM-202 engine families only),
  - (4) transmission controlled spark advance (GM-301 and GM-302 engine families only).

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Article 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Issue a resolution of approval to General Motors Corporation with respect to its 1972-model vehicles, 6,000 pounds or less gross vehicle weight, of the engine families listed below:

## Engine Family GM-201 with "CCS"

Engine Size - 350 cubic inches

Pontiac Division:

LeMans, LeMans Luxury, LeMans Sport,  
LeMans Station Wagon, Firebird, Esprit, Formula, and Ventura II.

Engine Size - 400 cubic inches

Pontiac Division:

LeMans, LeMans Luxury, LeMans Sport,  
LeMans Station Wagon, Firebird, Esprit, Catalina and Safari.

Engine Size - 455 cubic inches

Pontiac Division:

Catalina, Safari, Grand Safari, and Bonneville.

## Engine Family GM-202 with "CCS"

Engine Size - 400 cubic inches

Pontiac Division:

LeMans, LeMans Luxury, LeMans Sport, LeMans Station Wagon,  
Firebird, Formula, Catalina, Grand Prix, GTO, and Safari.

Engine Size - 455 cubic inches

Pontiac Division:

LeMans, LeMans Luxury, LeMans Sport, LeMans Station Wagon,  
Catalina, Safari, Grand Safari, Bonneville, Grand Ville, GTO,  
Grand Prix (Model J and SJ), Firebird, Formula, and Trans AM.

## Engine Family GM-301 with "CCS"

Engine Size - 350 cubic inches

Oldsmobile Division:

F-85, Cutlass, Cutlass S Coupe, Cutlass Cruiser, Cutlass Supreme,  
Vista Cruiser, Delta 88, Delta 88 Royale.

## Engine Family GM-302 with "CCS"

Engine Size - 455 cubic inches

Oldsmobile Division:

F-85 Cutlass, Cutlass S Coupe, Cutlass Cruiser, Cutlass Supreme,  
Vista Cruiser, Delta 88, Delta 88, Delta 88 Royale, Custom Cruiser,  
Ninety-Eight, and Toronado.

## Engine Family GM-401 with "AIR-EGR"

Engine Size - 350 cubic inches

Buick Division:

Skylark, Skylark Custom, Sportwagon, GS350, GS Stage 1, LeSabre Custom.

## Engine Family GM-402 with "AIR-EGR"

Engine Size - 455 cubic inches

Buick Division:

Electra, LeSabre, Riviera, Centurion, Riviera GS, GS 455, GS Stage 1,  
Estate Wagon.

STATE OF CALIFORNIA

AIR RESOURCES BOARD

Resolution 71 - 48

July 21, 1971

- WHEREAS, the Legislature in Statutes of 1970, Chapter 1579 (AB #16), required the Air Resources Board to determine the periods when agricultural burning shall not be permitted; and
- WHEREAS, the Air Resources Board on March 17, 1971, adopted guidelines for the regulation of agricultural burning; and
- WHEREAS, implementation of the agricultural burning regulations in accordance with the adopted guidelines requires wind and temperature data aloft that are not currently available at representative locations in parts of the North Central Coast Air Basin, the South Coast Air Basin, and the Sacramento Valley Air Basin;
- THEREFORE, BE IT RESOLVED, that the Air Resources Board authorizes the Executive Officer to negotiate and execute contracts with government and private agencies in an amount not to exceed \$29,000, for the purpose of obtaining the necessary wind and temperature data in the North Central Coast Air Basin, the South Coast Air Basin, and the Sacramento Valley Air Basin.

State of California

AIR RESOURCES BOARD

Resolution 71-49

July 21, 1971

WHEREAS, Mr. W. E. White, 4330 Barrett Road, Carmichael, California, has submitted an application for a Board finding that his "Crankcase Liquid Emission Collector" device be exempt from the prohibitions of Section 27156 of the California Vehicle Code; and

WHEREAS, the prohibitions of Section 27156, as amended on November 23, 1970, do not apply to an alteration, modification, or modifying device, apparatus, or mechanism found by resolution of the Air Resources Board either to not reduce the effectiveness of any required motor vehicle pollution control device or to result in increased emissions from such modified or altered vehicle; and

WHEREAS, the Board's staff has made an engineering evaluation of the "White Crankcase Liquid Emission Collector" device and has concluded that the device will not reduce the effectiveness of emission control devices;

NOW, THEREFORE, BE IT RESOLVED, That this Board find that the "White Crankcase Liquid Emission Collector" device does not reduce the effectiveness of any required motor vehicle pollution control device and is therefore exempt from the prohibitions in Section 27156 of the Vehicle Code;

IT IS FURTHER RESOLVED, THAT THE EXECUTIVE OFFICER IS INSTRUCTED TO ADVISE MR. W.E. WHITE THAT THIS RESOLUTION HAS BEEN ADOPTED AND THAT THE RESOLUTION DOES NOT CONSTITUTE A CERTIFICATION, ACCREDITATION, APPROVAL, OR ANY OTHER TYPE OF ENDORSEMENT BY THE AIR RESOURCES BOARD OF ANY CLAIMS OF THE APPLICANT CONCERNING ANTI-POLLUTION BENEFITS OR ANY ALLEGED BENEFITS OF THE "WHITE CRANKCASE LIQUID EMISSION COLLECTOR" DEVICE.

State of California

AIR RESOURCES BOARD

Staff Report

Evaluation of the "White Crankcase Liquid Emission Collector"

July 21, 1971

I. Introduction

This report is a summary of the staff's evaluation of the "White Crankcase Liquid Emission Collector." The basis of this report is the "Air Resources Board Criteria for Determining Compliance with Section 27156 of the Vehicle Code," adopted February 17, 1971. This report is only concerned with the effects on the control of emissions due to the installation of the device. In no way does the report imply an endorsement by the staff of any beneficial effects of the "White Crankcase Liquid Emission Collector."

II. Description of the Device

The device consists of a glass container inserted in the P.C.V. line between the crankcase and the intake manifold. This container collects oil droplets, condensed fuel, and water vapor. The inventor claims that his device helps keep the P.C.V. valve and the engine clean.

III. Engineering Evaluation

The device functions as a trap and there is no way that air can get in or out of it unless the container or seal is broken. The container is emptied when it is about half full. It is the opinion of the staff that the device will not interfere with the flow of blowby gases from the crankcase to the intake manifold. Since no air is admitted, there will be no air-fuel ratio change and consequently no effect on the exhaust emissions.

IV. Conclusion and Recommendation

The staff has found no evidence that the "White Crankcase Liquid Emission Collector" will reduce the effectiveness of required existing motor vehicle emission control devices. The staff, therefore, recommends that the Board find the "White Crankcase Liquid Emission Collector" device be exempt from the prohibitions of Section 27156 of the Vehicle Code by adopting Resolution 71-49.



State of California

AIR RESOURCES BOARD

Resolution 71-50

July 21, 1971

WHEREAS, European Car Service, 145 W. Manchester, Inglewood, California has applied for the testing of an experimental motor vehicle pollution control device for approval by this Board; and

WHEREAS, the device consists of liquid petroleum gas (LPG) carburetor, pressurized tank, pressure regulator, shutoff valves and fuel lines; and

WHEREAS, Section 39181 of the Health and Safety Code, authorizes the Board to issue such permits,

NOW, THEREFORE, BE IT RESOLVED, That European Car Service is hereby granted six (6) permits for testing an experimental control device installed on six vehicles, for a period of one year from this date.

State of California

AIR RESOURCES BOARD

Resolution 71-51

July 21, 1971

WHEREAS, Ford Motor Company has submitted an application and all test data for 1972 California approval of an exhaust emission control system for vehicles greater than 6,000 pounds gross vehicle weight; and

WHEREAS, the applicant's exhaust control system is described as follows:

Engine-modification type system with major elements:

- (1) leaner carburetion plus idle rich limiter,
- (2) modified distributor calibrated to provide optimum spark timing,
- (3) improved choke calibration,
- (4) recommended maintenance.

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Sub-Chapter 1, and Sub-Chapter 2, Article 2;

NOW, THEREFORE, BE IT RESOLVED, That this Board under the powers and authority granted in Chapter 4, commencing at Section 39080, Division 26 of the Health and Safety Code,

Issue a resolution of approval to Ford Motor Company with respect to the 1972-model vehicles, greater than 6,000 pounds gross vehicle weight, with engines of the following sizes (cubic inches): 240, 300, 302, 360, 361, 390, 391, 401, 477 and 534.

State of California  
AIR RESOURCES BOARD

Staff Report

Exhaust Emission Control System Approval  
1972-Model Vehicles Over 6,000 Pounds Gross Vehicle Weight

Ford Motor Company

July 21, 1971

Ford Motor Company has submitted an application containing all of the information required by the California Exhaust Emission Test Procedure for 1972-model vehicles over 6,000 pounds gross vehicle weight.

The applicant's exhaust emission control system is an engine-modification system.

Emission Data of Each Test Engine  
Projected to 1,500 Hours

Engine Size Cubic Inches	Test Engine Number	Projected Emission Level at 1,500 Hours	
		Hydrocarbons, ppm	Carbon Monoxide, %
240	X2TE1-240-2-231	162	.23
	X2UE1-240-2-229	135	.61
300	UE1-300-7	159	.28
	X2TE1-300-1-250HD	81	.37
302	X2TE2-302-1-225	155	.27
	X2TE2-302-1-224	159	.39
360	X2TE2-360-1-220	140	.47
	X2TE2-360-1-221	168	.22
361	X2TE2-361-1-200	92	.36
	X2TE2-361-1-201	88	.32
390	X2TE2-390-1-210	141	.52
	X2TE2-390-1-208	128	.39
391	X2HT4-391-1-207	148	.57
	X2TE4-391-1-200	131	.56
401	X2HT4-401-1-200	121	.33
477	X2HE4-477-1-202	149	.44
534	X9T4-1-9	177	.38

Ford Motor Company

July 21, 1971

Each emission data engine met the emission standards of 180 ppm hydrocarbons and 1.0 percent carbon monoxide.

Based on the test data and other information submitted by the applicant, the staff finds that the Ford Motor Company exhaust control system for vehicles over 6,000 pounds gross vehicle weight meets California requirements for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-51.

State of California

AIR RESOURCES BOARD

Resolution 71-51-A

August, 1971

WHEREAS, Ford Motor Company has submitted a supplemental application and all test data of 330 cubic inch engines for 1972 California approval of an exhaust emission control system for vehicles greater than 6,000 pounds gross vehicle weight;

WHEREAS, the applicant's exhaust control system is described as follows:

Engine-modification type system with major elements:

- (1) leaner carburetion plus idle rich limiter,
- (2) modified distributor calibrated to provide optimum spark timing,
- (3) improved choke calibration,
- (4) recommended maintenance, and

WHEREAS, the board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Subchapter 1, and Subchapter 2, Article 2;

NOW, THEREFORE, BE IT RESOLVED, That this Board under the powers and authority granted in Chapter 4, commencing at Section 39080, Division 26 of the Health and Safety Code,

Issue a resolution of approval to Ford Motor Company with respect to the 1972-model vehicles, greater than 6,000 pounds gross vehicle weight, with engines of the following size (cubic inches): 330.

State of California

AIR RESOURCES BOARD

Staff Report

Exhaust Emission Control System Approval  
1972-Model Vehicles over 6,000 Pounds Gross Vehicle Weight

Ford Motor Company

August, 1971

The Board on July 21, 1971 adopted Resolution 71-51 approving the exhaust emission control system of the Ford Motor Company for 1972 model year heavy-duty vehicles. At that time, the applicant had not completed its emission testing of a 330 cubic inch engine and is now submitting a supplemental application of approval including emission data to qualify this engine.

The applicant's exhaust emission control system is an engine-modification.

Emission Data of Each Test Engine  
Projected to 1,500 Hours

Engine Size Cubic Inches	Test Engine Number	Projected Emission Level at 1,500 Hours	
		Hydrocarbons, ppm	Carbon Monoxide, %
330	X2TL2-330-1-220-ID	147	.59
	X2TE2-330-1-209-HU	160	.47

Each emission data met the emission standards at 180 ppm hydrocarbons and 1.0 percent carbon monoxide.

Based on the test data and other information submitted by the applicant, the staff finds that the Ford Motor exhaust emission control system for vehicles over 6,000 pounds gross vehicle weight with 330 cubic inch engines meets California requirements for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-51A.

State of California

AIR RESOURCES BOARD

Resolution 71-52

July 21, 1971

WHEREAS, Nissan Motor Company, Ltd., Japan, submitted an application and all required test data for approval of its emission control systems for its 1972-model Datsun vehicles;

WHEREAS, the applicant's exhaust control systems are described as follows:

Engine-modification system with major elements:

- (1) transmission controlled spark advance,
- (2) temperature-sensing switches,
- (3) throttle opener,
- (4) dual point distributor with specified advance characteristics,
- (5) carburetor with specified flow rates and boost-controlled deceleration device,
- (6) recommended maintenance.

Air-injection system with major elements:

- (1) rotary-vane pump to inject air into exhaust manifold,
- (2) temperature-sensing switch,
- (3) throttle opener,
- (4) dual point distributor with specified advance characteristics,
- (5) carburetor with specified flow rates and boost-controlled deceleration device,
- (6) recommended maintenance; and

WHEREAS, the Board finds that the systems comply with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Article 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Issue a resolution of approval to Nissan Motor Company, Ltd., with respect to its 1972-model vehicles, 6,000 pounds or less gross vehicle weight, of the engine families listed below:

<u>Engine Family Identification</u>	<u>Control System*</u>	<u>Engine Size Cubic Inches</u>	<u>Vehicle Model</u>
Nissan-1 A12	EM	71.5	Datsun 1200 Series
Nissan-2 L16	EM or AI	97.4	Datsun 1600 Series & Pickup
Nissan-3 L24	AI	146.0	Datsun 240Z Series

\*  
EM = Engine Modification  
AI = Air Injection System

State of California

AIR RESOURCES BOARD

Staff Report

1972 Emission Control Systems Approval

Nissan Motor Company, Ltd.

July 21, 1971

Nissan Motor Company, Ltd., has submitted a complete application for 1972-model year approval of its exhaust emission control systems for its Datsun vehicles. The applicant elected to qualify these vehicles for meeting the 1972 exhaust emission standards by the optional test procedure.

The applicant's exhaust emission control systems are either of the engine-modification type or air-injection type.

Projected Emissions of Each Test Vehicle

Engine Family Identification	Engine Size Cubic Inches	Vehicle Number	Control System*	Projected Exhaust Emissions at 50,000 Miles		
				HC-gms/mile	CO-gms/mile	NO <sub>2</sub> -gms/mile
Nissan-1 A12	71.5	A217	EM	1.65	22.7	2.49
Nissan-1 A12	71.5	A214	EM	2.07#	19.9#	1.70**
Nissan-2 L16	97.4	B522	EM	2.43	20.9	2.32
Nissan-2 L16	97.4	B527	AI	1.78#	19.4#	2.77**
Nissan-2 L16	97.4	K292	EM	2.36#	19.3#	2.03**
Nissan-2 L16	97.4	K302	AI	2.03	19.6	1.98
Nissan-3 L24	146.0	F163	AI	2.60	21.3	2.81
Nissan-3 L24	146.0	F161	AI	2.50#	25.0#	2.21**
Nissan-3 L24	146.0	F160	AI	2.38	25.1	2.76
Nissan-3 L24	146.0	F164	AI	2.18	25.1	2.93

\*AI - Air Injection  
EM - Engine Modification

#E.P.A. Lab. Data

\*\*Hitachi Sawa Lab. Data

Each test vehicle met the 1972-model year emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide and 3.2 grams per mile oxides of nitrogen.

Nissan also states in its application that the engine and transmission combination of the vehicles for which approval is requested have been designed to operate with 91 Research Octane Number fuel and that no adverse driveability effect will result from the use of such fuel.

Based on the test data and other information submitted by the applicant, the staff finds that Nissan Motor Company exhaust emission control systems meet California requirements for vehicles under 6,000 pounds gross vehicle weight for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-52.



State of California  
AIR RESOURCES BOARD

Resolution 71-53

July 21, 1971

WHEREAS, Automotive Performance Inc., a Division of Oaks Diversified Industries, Dallas, Texas, is no longer the owner of the "Mark II Vapor Injector" since it declared bankruptcy and sold its assets to Mr. Frank Kirmss, Jr., Dawn Distributing Company;

WHEREAS, Resolution 70-5 which approved the "Mark II Vapor Injector" as a crankcase emission control system should be invalidated because of the change of ownership of the device;

WHEREAS, the new owner, Mr. Frank Kirmss, Jr. of Dawn Distributing Company, Dallas, Texas, has submitted an application for a Board finding that its "Mark II Vapor Injector" device is exempt from the prohibitions of Section 27156 of the California Vehicle Code;

WHEREAS, the prohibitions of Section 27156, as amended on November 23, 1970, do not apply to an alteration, modification, or modifying device, apparatus, or mechanism found by resolution of the State Air Resources Board either to not reduce the effectiveness of any required motor vehicle pollution control device or not to result in increased emissions from such modified or altered vehicle; and

WHEREAS, based on an engineering evaluation and test data, the staff had concluded that the "Mark II Vapor Injector" device will not significantly reduce the effectiveness of required emission control devices on 1970 and prior model year vehicles with engine displacements over 140 cubic inches;

NOW, THEREFORE, BE IT RESOLVED, That Resolution 70-5 of the Air Resources Board is hereby rescinded;

BE IT FURTHER RESOLVED that the Air Resources Board finds that the "Mark II Vapor Injector" device, owned by Mr. Frank Kirmss, Jr. of Dallas, Texas, does not reduce the effectiveness of any required motor vehicle pollution control device for 1970 and prior model year vehicles with engines over 140 cubic inch displacement and is therefore exempt from the prohibitions in Section 27156 of the Vehicle Code, as to such vehicles; and

IT IS FURTHER RESOLVED THAT THE EXECUTIVE OFFICER IS INSTRUCTED TO ADVISE MR. KIRMSS, JR. THAT THIS RESOLUTION HAS BEEN ADOPTED AND THAT THE RESOLUTION DOES NOT CONSTITUTE A CERTIFICATION, ACCREDITATION, APPROVAL, OR ANY OTHER TYPE OF ENDORSEMENT BY THE AIR RESOURCES BOARD OF ANY CLAIMS OF THE APPLICANT CONCERNING ANTI-POLLUTION BENEFITS OR ANY OTHER ALLEGED BENEFITS OF THE "MARK II VAPOR INJECTOR" DEVICE.

State of California

AIR RESOURCES BOARD

V. C. 27156 Resolution 71-53-A

October 20, 1971

WHEREAS, Automotive Performance Inc., a Division of Oaks Diversified Industries, Dallas, Texas, is no longer the owner of the "Mark II Vapor Injector" since it declared bankruptcy and sold its assets to Mr. Frank Kimss, Jr., Dawn Distributing Company;

WHEREAS, Resolution 70-5 which approved the "Mark II Vapor Injector" as a crankcase emission control system should be invalidated because of the change of ownership of the device;

WHEREAS, the new owner, Mr. Frank Kimss, Jr., of Dawn Distributing Company, Dallas, Texas, has submitted an application for a Board finding that its "Mark II Vapor Injector" device be exempt from the prohibitions of Section 27156 of the California Vehicle Code;

WHEREAS, the prohibitions of Section 27156 do not apply to an alteration, modification, or modifying device, apparatus, or mechanism found by resolution of the Air Resources Board either to not reduce the effectiveness of any required motor vehicle pollution control device or not to result in increased emissions from such modified or altered vehicle; and

WHEREAS, the Board's staff has made an engineering evaluation of the "Mark II Vapor Injector" device and has concluded that the device will not reduce the effectiveness of required emission control devices on 1970 and prior model year vehicles with engine displacements over 140 cubic inches;

NOW, THEREFORE, BE IT RESOLVED, That Resolution 70-5 of the Air Resources Board is hereby rescinded;

BE IT FURTHER RESOLVED, That this Board find that the "Mark II Vapor Injector" device does not reduce the effectiveness of any required motor vehicle pollution control device for 1970 and prior model year vehicles with engines over 140 cubic inch displacement and is therefore exempt from the prohibitions of Section 27156 of the Vehicle Code;

IT IS FURTHER RESOLVED, That the Executive Officer is instructed to advise Dawn Distributing Company that:

- (1) THIS RESOLUTION HAS BEEN ADOPTED AND THAT THE RESOLUTION DOES NOT CONSTITUTE A CERTIFICATION, ACCREDITATION, APPROVAL, OR ANY OTHER TYPE OF ENDORSEMENT BY THE AIR RESOURCES BOARD OF ANY CLAIMS OF THE APPLICANT CONCERNING ANTI-POLLUTION BENEFITS OR ANY ALLEGED BENEFITS OF THE "MARK II VAPOR INJECTOR" DEVICE;
- (2) No claim of any kind, such as "Approved by Air Resources Board" may be made with respect to the action taken herein in any advertising or other oral or written communication;
- (3) Section 17500 of the Business and Professions Code makes unlawful untrue or misleading advertising and Section 17534 makes violation punishable as a misdemeanor;

- (4) Sections 39130 and 39184 of the Health and Safety Code provide as follows:

39130. No person shall sell, display, advertise, or represent as a certified device any device which, in fact, is not a certified device. No person shall install or sell for installation upon any motor vehicle, any motor vehicle pollution control device which has not been certified by the Board.

29184. No person shall sell, display, advertise, or represent as an accredited device any device which, in fact, is not an accredited device. No person shall install or sell for installation upon any used motor vehicle any motor vehicle pollution control device which has not been accredited by the Board.

- (5) Any apparent violation of the above policy or laws will be submitted to the Attorney General of California for such action as he deems advisable.

IT IS FURTHER RESOLVED, That Resolution 71-53 is rescinded.

State of California  
AIR RESOURCES BOARD

Staff Report

Evaluation of a "Mark II Vapor Injector" Device

July 21, 1971

I. Introduction

This report is a summary of the staff's evaluation of the "Mark II Vapor Injector" device. The basis of this report is the Air Resources Board Criteria for Determining Compliance with Section 27156 of the Vehicle Code," adopted February 17, 1971. This report is only concerned with the affects on exhaust emission levels due to the installation of the device. No consideration was given to its affects on performance or driveability of the vehicle. In no way does the report imply an endorsement by the staff of any beneficial effects of the "Mark II Vapor Injector" device.

II. Description of the Device

The "Mark II Vapor Injector" consists of a glass reservoir containing a solution of volatile solvent. One end of a rubber tube is connected to the outlet in the metal cap and the other end is connected to a spacer plate inserted between the carburetor and the intake manifold. A screw adjustment on the intake located on top of the cap regulates an orifice which limits the flow of air and vapor from the glass jar to the intake manifold. The tube from the outlet of the Mark II can also be inserted into the P.C.V. line by means of a "T" connection where practical.

III. Engineering Evaluation

The Mark II Vapor Injector was previously approved as a crankcase emission control system in Resolution 70-5, March 30, 1970. Tests conducted at the Air Resources Laboratory showed that the device has no adverse effects on emissions from engines over 140 cubic inches.

IV. Change in Ownership

The previous owners, Automotive Performance, a Division of Oaks Diversified Industries of Dallas, Texas, was declared bankrupt on April 1, 1971 by the U. S. District Court for Northern Texas, Dallas Division, Bankruptcy No. 3-2017. The assets were sold to the new owner, Mr. Frank Kirmse, Jr., Dawn Distributing Company, 10840 Rosser Road, Dallas, Texas 75229.

V. Conclusion and Recommendation

Since Automotive Performance Inc. is no longer the owner of the "Mark II Vapor Injector" device it is recommended that Resolution 70-5 be rescinded.

V. Conclusion and Recommendation - Cont'd

The staff has found no evidence that the "Mark II Vapor Injector" will reduce the effectiveness of required existing motor vehicle emission control devices in vehicles prior to the 1971-model year with engine size classes B through F. The staff, therefore, recommends that the Board find that the "Mark II Vapor Injector" device be exempt from the prohibitions of Section 27156 of the Vehicle Code for all vehicles prior to the 1971-model year with engines greater than 140 cubic inch displacement.

The staff recommends the adoption of Resolution 71-53.

July 21, 1971

WHEREAS, Daimler-Benz, Inc., Germany, submitted an application and all test data for approval of its exhaust emission control systems for the 1972-model vehicles; and

WHEREAS, the applicant's exhaust control systems are described as follows:

Fuel-injection system with major elements:

- (1) electronically or mechanically controlled fuel injection with deceleration fuel shutoff,
- (2) distributor with specified advance characteristics,
- (3) retarded ignition timing at low rpm with high temperature override,
- (4) recommended maintenance.

Engine-modification system with major elements:

- (1) carburetor with specified flow rates,
- (2) distributor with specified advance characteristics,
- (3) retarded ignition timing at low rpm with high temperature override,
- (4) throttle valve lift control with low and high temperature override,
- (5) recommended maintenance.

WHEREAS, the Board finds that the systems comply with the California Administrative Code, Title 13, Chapter 3, Sub-Chapter 1 and Sub-Chapter 2, Article 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Issue a resolution of approval to Daimler-Benz, Inc., Germany, with respect to the 1972-model vehicles, 6,000 pounds or less gross vehicle weight, as listed below:

<u>Model</u>	<u>Emission Control</u>	<u>Engine Size</u>
220/8	EM	134
250/8	EM	169.5
250 C/8	EM	169.5
280 SE/8	FI	169.5
280 SE-4.5	FI	276
280 SEL-4.5	FI	276
300 SEL-4.5	FI	276
450 SL	FI	276
300 SEL-6.3	FI	386.3
600	FI	386.3

\*FI - Fuel Injection  
- Engine Modification

State of California

AIR RESOURCES BOARD

Staff Report

1972 Emission Control Systems Approval

Daimler-Benz, Inc.

July 21, 1971

Daimler-Benz, Inc. has submitted an application for approval of the exhaust emission control systems to be used on its 1972-model vehicles. The applicant's vehicles were tested using the cold-start, seven-mode - seven-cycle test procedure.

The applicant's exhaust emission control systems are either of the fuel-injection or engine-modification type as listed below:

Projected Emissions of Each Test Vehicle

Engine Size Cubic Inches	Emission Test Vehicle Number	Exhaust Control System*	Projected Exhaust Emissions at 50,000 Miles		
			HC-gms/mi	CO-gms/mi	NO <sub>2</sub> -gms/mi
134	MB220/8 (A19)	EM	1.3	19	2.8
134	MB220/8 (A20)	EM	1.1	14	2.9
169.5	MB250/8 (A21)	EM	0.9	12	2.6
169.5	MB280 SE/8 (A22)	FI	1.4	6	2.7
276	MB280 SEL-4.5 (A24)	FI	0.6	9	1.4
276	MB450 SL (A24)	FI	0.9	14	2.7
386.3	MB300 SEL-6.3 (A25)	FI	1.2	20	1.0
386.3	MB600 (A26)	FI	1.3	13	2.6

\*FI - Fuel Injection

EM - Engine Modification

Each test vehicle met the exhaust emission standards of 1.5 grams per mile hydrocarbons, 23 grams per mile carbon monoxide, and 3 grams per mile oxides of nitrogen.

Confirmatory tests conducted at the Environmental Protection Agency laboratory substantiate the manufacturer's data.

Daimler-Benz, Inc. conducted additional exhaust emission tests using 91 research octane number gasoline at 50,000 miles on the durability data vehicles and at 4,000 miles on the above emission data vehicles. Reported results showed California emission standards were met and no "knocking" was evidenced.

Based on the test data and other information submitted by the applicant, the staff finds that the Daimler-Benz, Inc. exhaust emission control systems meet California requirements for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-54.

State of California

AIR RESOURCES BOARD

Resolution 71-55

July 21, 1971

WHEREAS, Ford Motor Company submitted an application and all required test data for approval of its exhaust emission control system for its 1972-model vehicles; and

WHEREAS, the applicant's exhaust control system is described as follows:

An engine-modification type exhaust emission control system called "IMPCO" (including NO<sub>x</sub> control) plus additional major elements:

- (1) carburetor with specified flow rates,
- (2) distributor with specified advance characteristics,
- (3) fuel deceleration valve,
- (4) electronic controlled spark system,
- (5) transmission regulated spark system or spark delay valve,
- (6) recommended maintenance.

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Article 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Issue a resolution of approval to Ford Motor Company with respect to its 1972-model vehicles, 6,000 pounds or less gross vehicle weight, as listed below:

<u>Engine Family Identification</u>	<u>Engine Size Cubic Inches</u>	<u>Vehicle Models</u>
2.0 Liter	122	Pinto and Capri



State of California

AIR RESOURCES BOARD

Staff Report

1972 Emission Control System Approval

Ford Motor Company

July 21, 1971

Ford Motor Company has submitted a complete application for 1972-model year approval of its exhaust emission control system for its 2.0 Liter engine family vehicles. The applicant tested these vehicles and met the 1972 exhaust emission standards using the optional test procedure.

The applicant's exhaust emission control system is of the engine-modification type.

Projected Emissions of Each Test Vehicle

<u>Engine Family Identification</u>	<u>Engine Size Cubic Inches</u>	<u>Vehicle Number</u>	<u>Projected Exhaust Emissions at 50,000 Miles</u>		
			<u>HC-gms/mile</u>	<u>CO-gms/mile</u>	<u>NO<sub>2</sub>-gms/mile</u>
2.0	122	1P 21-D	3.0	30	2.3
2.0	122	1P 39-D	2.2	29	2.4

Each test vehicle met the 1972-model year emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide and 3.2 grams per mile oxides of nitrogen.

Confirmatory tests conducted at the Environmental Protection Agency laboratory substantiate the manufacturer's data.

Based on the test data and other information submitted by the applicant, the staff finds that Ford Motor Company exhaust emission control system meets California requirements for vehicles under 6,000 pounds gross vehicle weight for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-55.

State of California

AIR RESOURCES BOARD

Resolution 71-55-A

August, 1971

WHEREAS, Ford Motor Company submitted an application and all required test data for approval of its exhaust emission control system for its 1972-model vehicles;

WHEREAS, the applicant's exhaust control system is described as follows:

An engine-modification type exhaust emission control system called "IMPCO" (including NO<sub>x</sub> control) plus additional major elements:

- (1) carburetor with specified flow rates,
- (2) distributor with specified advance characteristics,
- (3) intake air temperature control,
- (4) electronic controlled spark system,
- (5) transmission regulated spark system for the 200 C.I.D. engine with automatic transmission, and for the 170 C.I.D. engine,
- (6) spark delay valve or transmission regulated advance system for the 1.6 liter (98 C.I.D.) engine,
- (7) fuel deceleration valve for the 1.6 liter (98 C.I.D.) engine,
- (8) recommended maintenance; and

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Article 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Issue a resolution of approval to Ford Motor Company with respect to its 1972-model vehicles, 6,000 pounds or less gross vehicle weight, as listed below:

<u>Engine Family Identification</u>	<u>Engine Size Cubic Inches</u>	<u>Vehicle Models</u>
1.6 Liter	98	Pinto & Capri
170 - 200	170	Maverick & Comet
170 - 200	200	Maverick & Comet

State of California

AIR RESOURCES BOARD

Staff Report

1972 Emission Control Systems Approval

Ford Motor Company

August, 1971

Ford Motor Company has submitted a complete application for 1972-model year approval of its exhaust emission control system for its vehicles for the "1.6 Liter" and "170-200" engine families. The applicant tested these vehicles and met the 1972 exhaust emission standards using the optional test procedure.

The applicant's exhaust emission control system is of the engine-modification type.

Projected Emissions of Each Test Vehicle

Engine Family Identification	Engine Size Cubic Inches	Vehicle Number	Projected Exhaust Emissions at 50,000 Miles		
			HC-gms/mile	CO-gms/mile	NO <sub>2</sub> -gms/mile
1.6 Liter	98	11P07-D*	3.2	25	2.1
1.6 Liter	98	11P08-D*	2.5	28	1.9
1.6 Liter	98	11P07-D**	3.0	25	1.7
1.6 Liter	98	11P08-D**	2.3	30	1.8
170 - 200	170	IQ 03-D	3.0	26	2.0
170 - 200	200	IQ 36-D	2.8	34	2.5
170 - 200	200	IQ 21-D	2.7	32	2.1

\* with transmission regulated spark

\*\* with spark delay valve

Each test vehicle met the 1972-model year emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide and 3.2 grams per mile oxides of nitrogen.

Confirmatory tests conducted at the Environmental Protection Agency laboratory using similar vehicles substantiate the manufacturer's data.

Based on the test data and other information submitted by the applicant, the staff finds that Ford Motor Company exhaust emission control system meets California requirements for vehicles under 6,000 pounds gross vehicle weight for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-55-A.

State of California

AIR RESOURCES BOARD

Resolution 71-55-B

September 15, 1971

WHEREAS, Ford Motor Company submitted an application and all required test data for approval of its exhaust emission control system for its 1972-model vehicles;

WHEREAS, the applicant's exhaust control system is described as follows:

An engine-modification type exhaust emission control system called "IMPCO" (including NO<sub>x</sub> control) plus additional major elements:

- (1) carburetor with specified flow rates,
- (2) distributor with specified advance characteristics,
- (3) intake air temperature control,
- (4) electronic-controlled spark system for the following engine sizes: 302-Maverick, Comet, Mustang, Torino and Montego only, 351, 400, 460,
- (5) transmission-regulated spark system for the following engine sizes: 240, 302-F-100 with automatic transmission, and Econoline only, 360 with automatic transmission only, 390 with manual transmission only,
- (6) spark delay valve for the following engine sizes: 302-Torino, Montego, Econoline and F-100 only, 360, 429,
- (7) choke delay valve for the following engine sizes: 390 with automatic transmission only, 429,
- (8) recommended maintenance; and

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Article 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Issue a resolution of approval to Ford Motor Company with respect to its 1972-model vehicles, 6,000 pounds or less gross vehicle weight, as listed below:

Engine Family: 240

Engine Size: 240 CID

Models: E-100, E-200, E-300, F-100.

Engine Family: 302

Engine Size: 302 CID

Models: Bronco, E-100, E-200, E-300, F-100, Maverick, Comet, Mustang, Torino, Montego.

Engine Family: 351C-2V

Engine Size: 351 CID

Models: Mustang, Cougar, Torino, Montego, Ford, Mercury.

Engine Family: 360-390

Engine Size: 360 CID

Models: F-100.

Engine Size: 390

Models: F-100.

Engine Family: 400

Engine Size: 400

Models: Ford, Mercury, Torino, Montego, Thunderbird.

Engine Family: 429-460

Engine Size: 429

Models: Ford, Mercury, Torino, Montego, Thunderbird.

Engine Size: 460

Models: Lincoln, Mark IV, Thunderbird, Mercury Marquis.

State of California

AIR RESOURCES BOARD

Staff Report

1972 Emission Control Systems Approval

Ford Motor Company

September 15, 1971

Ford Motor Company has submitted a complete application for 1972-model year approval of its exhaust emission control system for engine families listed below. The applicant tested these vehicles and met the 1972 exhaust emission standards using the optional test procedure.

The applicant's exhaust emission control system is of the engine-modification type.

Projected Emissions of Each Test Vehicle

<u>Engine Family Identification</u>	<u>Engine Size Cubic Inches</u>	<u>Vehicle Number</u>	<u>Projected Exhaust Emissions at 50,000 Miles</u>		
			<u>HC-gms/mi</u>	<u>CO-gms/mi</u>	<u>NO<sub>2</sub>-gms/mi</u>
240	240-IV	12F01-1	2.3*	25*	2.6
240	240-IV	1E09-1	2.9	33	1.7
302	302-2V	1037-D	2.3*	13*	2.2
302	302-2V	1Z32-D	2.8	17	3.0
302	302-2V	1U27-D	3.1	33	1.2
302	302-2V	1F26-1	3.1	36	2.1
351 C-2V	351-2V	11051-D	1.8*	23*	2.7
351 C-2V	351-2V	1W12-D	1.6	20	2.5
360-390	360-2V	1F77-1	2.1*	14*	2.0
360-390	360-2V	1F64-1	2.7	33	1.5
400	400	11A94-D	1.3*	20*	2.1
400	400	11M31-D	1.8	35	2.0
429-460	429	11M51-D	1.4*	19*	2.0
429-460	429	1A139-D	1.7	17	1.7
429-460	429	1S17-D	3.1	36	2.3
429-460	460	1L21-D	1.6*	18*	2.6

\* EPA Confirmatory tests

Each test vehicle met the 1972-model year emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide and 3.2 grams per mile oxides of nitrogen.

Confirmatory tests conducted at the Environmental Protection Agency laboratory using the same or similar vehicles substantiate the manufacturer's data.

State of California

AIR RESOURCES BOARD

Resolution 71-55-D

October 20, 1971

WHEREAS, Ford Motor Company submitted an application and all required test data for approval of the exhaust emission control system for its 1972-model vehicles:

WHEREAS, the applicant's exhaust control system is described as follows:

An engine-modification type exhaust emission control system called "IMPCO" (including NO<sub>x</sub> control) plus additional major elements:

- (1) carburetor with specified flow rates,
- (2) distributor with specified advance characteristics,
- (3) intake air temperature control,
- (4) electronic-controlled spark system with automatic transmission only,
- (5) spark delay valve with manual transmissions only,
- (6) recommended maintenance; and

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Article 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Issue a resolution of approval to Ford Motor Company with respect to its 1972-model vehicles, 6,000 pounds or less gross vehicle weight, as listed below:

Engine Family: 2.6L

Engine Size: 159 CID

Models: Capri

Engine Family: 351C-4V

Engine Size: 351 CID

Models: Mustang, Cougar, Torino, Montego, Pantera.

State of California

AIR RESOURCES BOARD

Staff Report

1972 Emission Control Systems Approval

Ford Motor Company

October, 1971

Ford Motor Company has submitted a complete application for 1972-model year approval of its exhaust emission control system for the family listed below. The applicant tested these vehicles and met the 1972 exhaust emission standards using the optional test procedure.

The applicant's exhaust emission control system is of the engine-modification type.

Projected Emissions of Each Test Vehicle

Engine Family Identification	Engine Size Cubic Inches	Vehicle Number	Projected Exhaust Emissions at 50,000 Miles		
			HC-gms/mi	CO-gms/mi	NO <sub>2</sub> -gms/mi
250	250-IV	1Q55-D	1.8	17	2.1
250	250-IV	11015-D	2.3*	36*	2.6

\* EPA Confirmatory tests

Each test vehicle met the 1972-model year emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide and 3.2 grams per mile oxides of nitrogen.

Confirmatory tests conducted at the Environmental Protection Agency laboratory substantiate the manufacturer's data.

Based on the test data and other information submitted by the applicant, the staff finds that Ford Motor Company exhaust emission control system meets California requirements for vehicles under 6,000 pounds gross vehicle weight for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-55-C.



State of California

AIR RESOURCES BOARD

Resolution 71-56

July 21, 1971

WHEREAS, Chrysler Corporation has submitted an application and all test data for 1972 California approval of an exhaust emission control system for vehicles greater than 6,000 pounds gross vehicle weight;

WHEREAS, the applicant's exhaust control system is described as follows:

Engine-modification type system with major elements:

- (1) carburetor with specified flow rates,
- (2) distributor with specified advance characteristics,
- (3) recommended maintenance; and

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Subchapter 1, and Subchapter 2, Article 2;

NOW, THEREFORE, BE IT RESOLVED, That this Board under the powers and authority granted in Chapter 4, commencing at Section 39080, Division 26 of the Health and Safety Code,

Issue a resolution of approval to Chrysler Corporation with respect to the 1972-model vehicles, greater than 6,000 pounds gross vehicle weight, with engines of the following sizes (cubic inches): 225, 318, 360, 361, 400 and 413.

State of California

AIR RESOURCES BOARD

Staff Report

Exhaust Emission Control System Approval  
1972-Model Vehicles Over 6,000 Pounds Gross Vehicle Weight

Chrysler Corporation

July 21, 1971

Chrysler Corporation has submitted an application containing all of the information required by the California Exhaust Emission Test Procedure for 1972-model vehicles over 6,000 pounds gross vehicle weight.

The applicant's exhaust emission control system is an engine-modification type system.

Emission Data of Each Test Engine  
Projected to 1,500 Hours

Engine Size Cubic Inches	Test Engine Number	Projected Emission Level at 1,500 Hours	
		Hydrocarbons, ppm	Carbon Monoxide, %
225	EG-225-T-36800	174	0.55
225	EG-225-V-37200	169	0.89
318	EG 318-T-37500	170	0.83
318	EG 318-W-36900	149	0.56
360	EG-360-T39700	173	0.61
361	EG-361-V-37300	110	0.44
361	EG-361-X-37000	130	0.59
400	EG-400-T-29000	129	0.67
413	EG-413-T-37400	151	0.83
413	EG-413-V-37100	180	0.85

Each emission data engine met the emission standards of 180 ppm hydrocarbons and 1.0 percent carbon monoxide.

Based on the test data and other information submitted by the applicant, the staff finds that the Chrysler Corporation exhaust control system for vehicles over 6,000 pounds gross vehicle weight meets California requirements for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-56.

State of California  
AIR RESOURCES BOARD

Resolution 71-57

July 21, 1971

WHEREAS, Chrysler Corporation submitted an application and all required test data for approval of its emission control systems for its 1972-model vehicles;

WHEREAS, the applicant's exhaust control systems are described as follows:

- (1) carburetor with specified flow rates and incorporating fast acting choke, external idle mixture limiter and solenoid throttle stop,
- (2) distributor with specified advance characteristics,
- (3) vehicle speed controlled spark advance above 31 miles per hour,
- (4) exhaust gas recirculation,
- (5) air-injection except engine family LA,
- (6) recommended maintenance; and

WHEREAS, the Board finds that the systems comply with the California Administrative Code, Title 13, Chapter 3, Subchapter 2, Article 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Issue a resolution of approval to Chrysler Corporation, with respect to its 1972-model vehicles, 6,000 pounds or less gross vehicle weight, of the engine families listed below:

ENGINE FAMILY - RG

Engine Size - 198 cubic inches

Vehicle Models - Valiant - Duster, Dart

Engine Size - 225 cubic inches

Vehicle Models - Valiant, Dart, Barracuda

Challenger, Satellite, Coronet-

Charger, Fury, Dodge, Dodge Trucks

(B1, B2, B3, D1, W1).

ENGINE FAMILY - LA

Engine Size - 318 cubic inches

Vehicle Models - Valiant, Dart, Barracuda  
Challenger, Satellite, Coronet-  
Charger, Fury, Dodge, Dodge  
Trucks  
(B1, B2, B3, D1, W1).

Engine Size - 340 cubic inches

Vehicle Models - Valiant, Dart, Barracuda  
Challenger, Satellite, Coronet-Charger.

Engine Size - 360 cubic inches

Vehicle Models - Fury, Dodge, Chrysler  
Dodge Trucks  
(B1, B2, B3, D1, W1).

ENGINE FAMILY - B

Engine Size - 400 cubic inches

Vehicle Models - Satellite, Coronet-Charger  
Fury, Dodge, Chrysler, Dodge Truck D100.

ENGINE FAMILY - RB

Engine Size - 440 cubic inches

Vehicle Models - Fury, Dodge, Chrysler,  
Imperial, Satellite, Coronet-Charger.

State of California  
AIR RESOURCES BOARD

Staff Report

1972 Emission Control Systems Approval

Chrysler Corporation

July 21, 1971

Chrysler Corporation has submitted a complete application for 1972-model year approval of its exhaust emission control systems for their light-duty vehicles. The applicant elected to qualify their vehicles for meeting the 1972 exhaust emission standards by the optional test procedure.

The applicant's exhaust emission control systems are a combination of engine modification type, air injection, and exhaust gas recycle.

Projected Emissions of Each Test Vehicle

Engine Family Identification	Engine Size Cubic Inches	Vehicle Number	Control <sup>(1)</sup> System	Projected Exhaust Emissions at 50,000 Miles <sup>(2)</sup>		
				HC-gms/mi.	CO-gms/mi.	NO <sub>2</sub> -gms/mi.
RG	225	624	EM, AIR, EGR	2.70*	36.4*	2.70
RG	225	655	EM, AIR, EGR	2.50**	28.7**	2.63
LA	318	675	EM, EGR	2.15*	36.8*	2.72
LA	360	571	EM, EGR	2.05**	29.3**	1.96
B	400	612	EM, AIR, EGR	1.72*	14.8*	2.08
B	400	583	EM, AIR, EGR	1.40*	28.1*	1.27
RB	440	639	EM, AIR, EGR	1.27*	32.4*	2.35
RB	440	632	EM, AIR, EGR	1.40**	33.8**	2.48

- (1) EM - Engine Modification  
AIR- Air Injection  
EGR- Exhaust Gas Recycle

- (2) NO<sub>2</sub> emissions data from Ethyl Corporation Laboratory

\* Environmental Protection Agency Data

\*\* Manufacturer's data

1972 Emission Control Systems Approval  
Chrysler Corporation

July 21, 1971

Each test vehicle met the 1972-model year emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide, and 3.2 grams per mile oxides of nitrogen.

Based on the test data and other information submitted by the applicant, the staff finds that Chrysler Corporation exhaust emission control systems meet California requirements for vehicles under 6,000 pounds gross vehicle weight for the 1972-model year. The staff therefore, recommends adoption of Resolution 71-57.

State of California

AIR RESOURCES BOARD

Resolution 71-58

September 15, 1971

WHEREAS, Trans-World Marketing, Bountiful, Utah, has submitted an application for a Board finding that its "Econo-Needle" device be exempt from the prohibitions of Section 27156 of the California Vehicle Code;

WHEREAS, the prohibitions of Section 27156 do not apply to an alteration, modification, or modifying device, apparatus, or mechanism found by resolution of the Air Resources Board either to not reduce the effectiveness of any required motor vehicle pollution control device or to result in increased emissions from such modified or altered vehicle; and

WHEREAS, the Board's staff has made an engineering evaluation of the Econo-Needle device and has concluded that the device will not reduce the effectiveness of required emission control devices on 1969-model year and earlier vehicles with an engine displacement over 140 cubic inches.

NOW, THEREFORE, BE IT RESOLVED, That this Board finds that the Econo-Needle device does not reduce the effectiveness of any required motor vehicle pollution control device for 1969-model year and earlier vehicles with engines over 140 cubic inch displacement and is therefore exempt from the prohibitions of Section 27156 of the Vehicle Code;

IT IS FURTHER RESOLVED, That the Executive Officer is instructed to advise Trans-World Marketing that:

- (1) THIS RESOLUTION HAS BEEN ADOPTED AND THAT THE RESOLUTION DOES NOT CONSTITUTE A CERTIFICATION, ACCREDITATION, APPROVAL, OR ANY OTHER TYPE OF ENDORSEMENT BY THE AIR RESOURCES BOARD OF ANY CLAIMS OF THE APPLICANT CONCERNING ANTI-POLLUTION BENEFITS OR ANY ALLEGED BENEFITS OF THE "ECONO-NEEDLE" DEVICE;
- (2) No claim of any kind, such as "Approved by Air Resources Board" may be made with respect to the action taken herein in any advertising or other oral or written communication;
- (3) Section 17500 of the Business and Professions Code makes unlawful untrue or misleading advertising and Section 17534 makes violation punishable as a misdemeanor;
- (4) Sections 39130 and 39184 of the Health and Safety Code provide as follows:

39130. No person shall sell, display, advertise, or represent as a certified device any device which, in fact, is not a certified device. No person shall install or sell for installation upon any motor vehicle, any motor vehicle pollution control device which has not been certified by the board.

State of California

AIR RESOURCES BOARD

Staff Report

Trans-World Marketing, Inc.

Evaluation of the "Econo-Needle"

September 15, 1971

I. Introduction

This report is a summary of the staff's evaluation of the "Econo-Needle" device. The basis for this report is the "Air Resources Board Criteria for Determining Compliance with Section 27156 of the Vehicle Code," adopted February 17, 1971. This report is only concerned with the effect on exhaust emission levels due to the installation of the device; no consideration was given to its effect on performance and driveability of the vehicle. In no way does the report imply an endorsement by the staff of any beneficial effects of the "Econo-Needle" device.

II. Description of the Device

The "Econo-Needle" is an idle fuel adjustment screw, similar to the original adjustment screw, but which has a longitudinal hole drilled through the center. This permits additional air to enter the idle air-fuel circuit under the influence of carburetor throat vacuum.

III. Evaluation

The maximum air flow through the "Econo-Needle" was found to be 0.61 cubic feet per minute. It is the staff's judgement that this amount of air drawn through the needle will lean the air/fuel mixture; however, this amount of leaning can be tolerated without adverse affects on hydrocarbons or carbon monoxide. The evaporative control systems on 1970 and later models would, however, have reduced effectiveness under these conditions since the drilled hole in the "Econo-Needle" provides an opening for fuel to leak to the atmosphere.

The applicant submitted exhaust emission test results performed by Automotive Testing Laboratories, Inc., Denver, Colorado, according to California 7-Mode Cycle Test Procedures before and after installation of the "Econo-Needle."

Prior to the baseline tests, the ignition dwell and timing, engine idle rpm and air/fuel ratio were checked and adjusted, if necessary, to the vehicle manufacturer's tune-up specifications.



IV. Test Results

The following table compares emission levels from each vehicle as adjusted to recommended factory settings and after installation and adjustment of the "Econo-Needle" as recommended by the manufacturer:

<u>Vehicle</u>	<u>Engine</u> <u>C.I.D.</u>	<u>Carburetor</u> <u>Mfg.</u>	<u>Bbls.</u>	<u>Needle</u> <u>Group</u>	<u>Hot Cycle Emissions</u>		
					<u>CO(%)</u>	<u>HC(ppm)</u>	<u>NO<sub>x</sub>(ppm)</u>
1970 Oldsmobile 350 Rochester	2			1			
				Baseline	1.6	274	736
				After Installation	1.6	272	739
1969 Ford 428 Ford			4	2			
				Baseline	1.1	210	896
				After Installation	1.0	225	899
1969 Chrysler 440 Holley			4	3			
				Baseline	1.9	171	666
				After Installation	1.6	161	643
1969 Chevy II 250 Rochester	1			4			
				Baseline	1.1	156	699
				After Installation	0.9	139	743
1969 Dodge Part 225 Holley			Single	1			
				Baseline	1.42	211	985
				After Installation	0.97	221	1009

V. Conclusion and Recommendation

The staff has found no evidence that the "Econo-Needle" device will reduce the effectiveness of required existing motor vehicle emission control devices in vehicles prior to the 1970-model year with engine size classes (b) through (f) when the engine is tuned to the vehicle manufacturer's specifications following installation of the device.

The staff, therefore, recommends that the Board find that the "Econo-Needle" device be exempt from the prohibitions of Section 27156 of the Vehicle Code for all vehicles prior to the 1970-model year with engines greater than 140 cubic inch displacement except vehicles equipped with idle mixture limiters.

Ref.:

Res. 71-58

State of California

AIR RESOURCES BOARD

Resolution 71-59

August, 1971

WHEREAS, General Motors Corporation has submitted an application and all test data for 1972 California approval of an exhaust emission control systems for vehicles greater than 6,000 pounds gross vehicle weight;

WHEREAS, the applicant's exhaust control system is described as follows:

Engine-modification type system with major elements:

- (1) carburetor with specified flow rates,
- (2) distributor with specified advance characteristics,
- (3) recommended maintenance; and

WHEREAS, the Board finds the system complies with the California Administrative Code, Title 13, Chapter 3, Subchapter 1, and Subchapter 2, Article 2,

NOW, THEREFORE, BE IT RESOLVED, That this Board under the powers and authority granted in Chapter 3, commencing at Section 39080, Division 26 of the Health and Safety Code,

Issue a resolution of approval to General Motors Corporation with respect to the 1972-model vehicles, greater than 6,000 pounds gross vehicle weight, with engines of the following sizes (cubic inches): Chevrolet 250, 292, 350, 366, 402, 427, and GMC 351, 401 and 478.

State of California

AIR RESOURCES BOARD

Resolution 71-59A

January 19, 1972

WHEREAS, General Motors Corporation has submitted an additional application and all test data for 1972 California approval of an exhaust emission control system for vehicles greater than 6,000 pounds gross vehicle weight;

WHEREAS, the applicant's exhaust emission control system is described as an

Engine-Modification type with major elements:

- (1) carburetor with specified flow rates,
- (2) distributor with specified advance characteristics,
- (3) recommended maintenance; and

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Subchapter 1, and Subchapter 2, Article 2;

NOW, THEREFORE, BE IT RESOLVED, That this Board under the powers and authority granted in Chapter 4, commencing at Section 39080, Division 26 of the Health and Safety Code,

Approve the exhaust emission control device of General Motors Corporation for its 1972-model vehicles, greater than 6,000 pounds gross vehicle weight, for its engine of the following size (cubic inches): Oldsmobile 455.

State of California

AIR RESOURCES BOARD

Resolution 71-60

August, 1971

WHEREAS, Bayerische Motoren Werke A.G. submitted an application and all required test data for approval of its emission control systems for its 1972-model light-duty vehicles;

WHEREAS, the applicant's exhaust control systems are described as follows:

- A. An air-injection and exhaust gas recycle exhaust emission control system (including NO<sub>x</sub> control) with major elements for the 121 engine family vehicles:
  - (1) air pump with air injection into the exhaust ports,
  - (2) vacuum-controlled exhaust gas recycle with temperature sensing switches,
  - (3) carburetor with specified flow rates and throttle closure control by manifold vacuum and engine speed,
  - (4) distributor with specified advance characteristics,
  - (5) recommended maintenance.
- B. An engine-modification and exhaust gas recycle type of exhaust emission control system (including NO<sub>x</sub> control) with major elements for the 130 engine family vehicles:
  - (1) vacuum-controlled exhaust gas recycle with temperature sensing switches,
  - (2) carburetor with specified flow rates and throttle closure control by manifold vacuum and engine speed,
  - (3) vacuum-controlled ignition advance and retard reversing system based on engine speed,
  - (4) distributor with specified advance characteristics,
  - (5) recommended maintenance; and

WHEREAS, the Board finds that the systems comply with the California Administrative Code, Title 13, Chapter 3, Subchapter 2, Article 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Issue a resolution of approval to Bayerische Motoren Werke, with respect to its 1972-model vehicles, 6,000 pounds or less gross vehicle weight, of the engine families listed below:

<u>Engine Family Identification</u>	<u>Control System</u>	<u>Engine Size Cubic Inches</u>	<u>Vehicle Model</u>
121	AIR, EGR	121.3	2002
130	EM, EGR	182	Bavaria & 3.0 CS

State of California

AIR RESOURCES BOARD

Staff Report

1972 Emission Control Systems Approval

Bayerische Motoren Werke A.G.

August, 1971

Bayerische Motoren Werke A.G. has submitted a complete application for 1972-model year approval of its exhaust emission control systems for their light-duty vehicles. The applicant elected to qualify their vehicles for meeting the 1972 exhaust emission standards by the optional test procedure.

The applicant's exhaust emission control systems are a combination of engine modification type, air injection, and exhaust gas recycle.

Projected Emissions of Each Test Vehicle

Engine Family Identification	Engine Size Cubic Inches	Vehicle Number	Control System	Projected Exhaust Emissions at 50,000 Miles		
				HC-gms/ml.	CO-gms/ml.	NO <sub>2</sub> -gms/ml.
121	121.3	2572700	AIR, EGR	2.2*	30*	1.9**
121	121.3	2532118	AIR, EGR	1.7	34	2.0
121	121.3	1676325	AIR, EGR	1.9	28	2.6
130	182	2420643	EM, EGR	2.6*	21*	2.1**
130	182	2420451	EM, EGR	2.3	27	2.6
130	182	2150648	EM, EGR	1.6	25	3.0

EM - Engine Modification

AIR - Air Injection

EGR - Exhaust Gas Recycle

\*Environmental Protection Agency Data

\*\*Ethyl Corporation Laboratory Data

Each test vehicle met the 1972-model year emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide, and 3.2 grams per mile oxides of nitrogen.

Based on the test data and other information submitted by the applicant, the staff finds that Bayerische Motoren Werke A.G. exhaust emission control systems meet California requirements for vehicles under 6,000 pounds gross vehicle weight for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-60.

State of California

AIR RESOURCES BOARD

Resolution 71-60A

November 17, 1971

WHEREAS, Bayerische Motoren Werke A.G. submitted an application and all required test data for approval of its emission control systems for its 1972-model light-duty vehicles;

WHEREAS, the applicant's exhaust control systems are described as follows:

Fuel-injection system with major elements:

- (1) electronically or mechanically controlled fuel injection,
- (2) distributor with specified advance characteristics,
- (3) recommended maintenance; and

WHEREAS, the Board finds that the systems comply with the Health and Safety Code Section 39052.5 and the California Administrative Code, Title 13, Sections 1944, 2109(h) and 2208(d),

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board approve the Bayerische Motoren Werke exhaust emission control systems for its 1972-model vehicles, 6,000 pounds or less gross vehicle weight, of the engine families listed below:

<u>Engine Family Identification</u>	<u>Control System</u>	<u>Engine Size Cubic Inches</u>	<u>Vehicle Model</u>
121.3	FI	121.3	2002 tii

FI - Fuel Injection

State of California

AIR RESOURCES BOARD

Staff Report

1972 Emission Control Systems Approval

Bayerische Motoren Werke A.G.

November 17, 1971

Bayerische Motoren Werke A.G. has submitted a complete application for 1972-model year approval of its exhaust emission control systems for their light-duty vehicles. The applicant elected to qualify their vehicles for meeting the 1972 exhaust emission standards by the optional test procedure.

The applicant's exhaust emission control systems are a combination of engine modification type and fuel injection.

Projected Emissions of Each Test Vehicle

<u>Engine Family Identification</u>	<u>Engine Size Cubic Inches</u>	<u>Vehicle Number</u>	<u>Projected Exhaust Emissions at 50,000 Miles</u>		
			<u>HC-gms/mi.</u>	<u>CO-gms/mi.</u>	<u>NO<sub>2</sub>-gms/mi.</u>
121.3	121.3	2700177	3.1*	33*	2.1**
121.3	121.3	1685733	2.0	20	1.6
121.3	121.3	1686205	2.0	24	1.6

FI - Fuel Injection

\* Environmental Protection Agency Data

\*\* Ethyl Corporation Laboratory Data

Each test vehicle met the 1972-model year emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide, and 3.2 grams per mile oxides of nitrogen.

Based on the test data and other information submitted by the applicant, the staff finds that Bayerische Motoren Werke A.G. exhaust emission control systems meet California requirements for vehicles under 6,000 pounds gross vehicle weight for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-60A.

State of California

AIR RESOURCES BOARD

Resolution 71-60-B

June 21, 1972

WHEREAS, Bayerische Motoren Werke A.G. submitted a supplementary application and all required test data for approval of its emission control systems for its 1972-model light-duty vehicles;

WHEREAS, the applicant's exhaust control systems are described as follows:

An engine-modification and exhaust gas recycle type of exhaust emission control system (including NOx control) with major elements for the 121 engine family vehicles:

- (1) vacuum-controlled exhaust gas recycle with temperature sensing switches,
- (2) carburetor with specified flow rates and throttle closure control by manifold vacuum and engine speed,
- (3) vacuum-controlled ignition advance and retard reversing system based on engine speed,
- (4) distributor with specified advance characteristics,
- (5) recommended maintenance; and

WHEREAS, the Board finds that the systems comply with the California Administrative Code, Title 13, Chapter 3, Subchapter 2, Article 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Issue a resolution of approval to Bayerische Motoren Werke, with respect to its 1972-model vehicles, 6,000 pounds or less gross vehicle weight, of the engine family listed below:

<u>Engine Family Identification</u>	<u>Control System</u>	<u>Engine Size Cubic Inches</u>	<u>Vehicle Model</u>
121	EM, EGR	121.3	2002



State of California  
AIR RESOURCES BOARD

Resolution 71-61

August, 1971

WHEREAS, International Harvester Company submitted an application and all test data required for 1972 California approval of an exhaust emission control system for vehicles over 6,001 pounds gross vehicle weight; and

WHEREAS, the applicant's exhaust control system is described as follows:

Engine-modification type system with major elements:

- (1) carburetor with specified flow rates,
- (2) distributor with specified advance characteristics,
- (3) recommended maintenance.

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Sub-Chapter 1, and Sub-Chapter 2, Article 2;

NOW, THEREFORE, BE IT RESOLVED, That this Board under the powers and authority granted in Chapter 4, commencing at Section 39080, Division 26 of the Health and Safety Code,

Issue a resolution of approval to International Harvester Company with respect to 1972-model vehicles, greater than 6,000 pounds gross vehicle weight, with engines of the following sizes (cubic inches): 258, 304, 345 and 392.

State of California  
AIR RESOURCES BOARD

Staff Report

1972 Exhaust Emission Control System Approval

International Harvester Company  
Heavy-Duty Vehicles

August, 1971

International Harvester Company has submitted an application containing all of the information required by the California Exhaust Emission Test Procedure for 1972-model vehicles over 6,000 pounds gross vehicle weight to obtain approval for its engines.

The applicant's exhaust control system is of the engine-modification type.

Emission Data of Each Test Engine  
Projected to 1,500 Hours

Engine Size Cubic Inches	Test Engine Number	Projected Exhaust Emissions to 1,500 Hours	
		Hydrocarbons, ppm	Carbon Monoxide, %
258	72-08	155	0.4
304	72-06	180	0.9
345	72-02	139	0.6
392	72-05	138	0.6

The test engine met the 1971 emission standards of 180 parts per million hydrocarbons and 1 percent carbon monoxide.

Based on the test data and other information submitted by the applicant, the staff finds that the International Harvester Company exhaust control system for vehicles over 6,000 pounds gross vehicle weight meets California requirements for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-61.

State of California

AIR RESOURCES BOARD

Resolution 71-61-A

October 20, 1971

WHEREAS, International Harvester Company submitted an application and all test data required for 1972 California approval of an exhaust emission control system for vehicles over 6,001 pounds gross vehicle weight;

WHEREAS, the applicant's exhaust control system is described as follows:

Engine-modification type system with major elements:

- (1) carburetor with specified flow rates,
- (2) distributor with specified advance characteristics,
- (3) recommended maintenance, and

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Sub-Chapter 1, and Sub-Chapter 2, Article 2;

NOW, THEREFORE, BE IT RESOLVED, That this Board under the powers and authority granted in Chapter 4, commencing at Section 39080, Division 26 of the Health and Safety Code,

Issue a resolution of approval to International Harvester Company with respect to 1972-model vehicles, greater than 6,001 pounds gross vehicle weight, with engines of the following sizes (cubic inches): 401, 406, 450, 478, 501, and 549.

State of California

AIR RESOURCES BOARD

Resolution 71-62

September 15, 1971

WHEREAS, A B Volvo, Car Division of Goteborg, Sweden, submitted an application and all required test data for approval of its emission control system for its 1972-model Volvo vehicles;

WHEREAS, the applicant's exhaust emission control system is described as follows;

Engine-modification system with major elements:

- (1) timed fuel injection with throttled air intake,
- (2) distributor with centrifugal advance characteristics and vacuum controlled ignition retard at idle and deceleration,
- (3) recommended maintenance; and

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Sub-Chapter 1 and Sub-Chapter 2, Article 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Issue a resolution of approval to the A B Volvo, Car Division, with respect to its 1972-model vehicles, 6,000 pounds or less gross vehicle weight, as listed below:

<u>Engine Family Identification</u>	<u>Engine Sizes Cubic Inches</u>	<u>Vehicle Model</u>
B20F	121	Volvo B20
B30F	182	Volvo B30

State of California

AIR RESOURCES BOARD

1972 Emission Control System Approval

AB Volvo Car Division

September 15, 1971

A B Volvo, Car Division, has submitted a complete application for 1972-model year approval of its exhaust emission control system for its Volvo vehicles. The applicant elected to qualify these vehicles for meeting the 1972 exhaust emission standards by the optional test procedure.

The applicant's exhaust emission control system is of the engine-modification type.

Projected Emissions of Each Test Vehicle

Engine Family Identification	Engine Size Cubic Inches	Vehicle Number	Projected Exhaust Emissions at 50,000 Miles		
			HC-gms/mi	CO-gms/mi	NO <sub>2</sub> -gms/mi
B20F	121	72:7	1.38	28.2	1.26**
B20F	121	72:10	1.46*	21.2*	2.32**
B30F	182	72:11	1.98	21.6	1.68**
B30F	182	72:12	1.62*	15.3*	2.25**

\* EPA Confirmatory Test

\*\* Aktiebolaget Atomenergi (Swedish Government) laboratory data

Each test vehicle met the 1972-model year emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide and 3.2 grams per mile oxides of nitrogen.

Based on the test data and other information submitted by the applicant, the staff finds that A B Volvo, Car Division exhaust emission control system meets California requirements for vehicles under 6,000 pounds gross vehicle weight for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-62.

State of California

AIR RESOURCES BOARD

Resolution 71-63

August 1971

WHEREAS, Triumph Motor Company, Division of British Leyland, Ltd., England, submitted an application and all required test data for approval of its emission control system for its 1972-model Triumph vehicles;

WHEREAS, the applicant's exhaust emission control system is described as follows:

Engine-modification system with major elements:

- (1) carburetor with specified flow rates,
- (2) distributor with specified advance characteristics with ignition retard at idle and deceleration,
- (3) temperature controlled air intake system,
- (4) recommended maintenance.

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Article 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Issue a resolution of approval to the Triumph Motor Company, Division of British Leyland, Ltd., with respect to its 1972-model vehicles, 6,000 pounds or less gross vehicle weight, as listed below:

<u>Engine Family Identification</u>	<u>Engine Sizes Cubic Inches</u>	<u>Vehicle Model</u>
TA	183	Triumph Stag
TB	122	Triumph GT6
TB	152	Triumph TR6
TC	79	Triumph Spitfire

State of California

AIR RESOURCES BOARD

Staff Report

1972 Emission Control System Approval

Triumph Motor Co., Ltd.  
Division of British Leyland

August 1971

Triumph Motor Company, Ltd., has submitted a complete application for 1972-model year approval of its exhaust emission control system for its Triumph vehicles. The applicant elected to qualify these vehicles for meeting the 1972 exhaust emission standards by the optional test procedure.

The applicant's exhaust emission control system is of the engine-modification type.

Projected Emissions of Each Test Vehicle

<u>Engine Family Identification</u>	<u>Engine Size Cubic Inches</u>	<u>Vehicle No.</u>	<u>Projected Exhaust Emissions HC gms/mi</u>	<u>CO gms/mi</u>	<u>at 50,000 m NO<sub>2</sub> gms/mi</u>
TC	79	TVC 658J	1.7**	30**	2.0*
TC	79	TVC 912G	2.0	22	1.9
TB	122	TVC 657J	2.2**	26**	2.0*
TB	122	PDV 449G	2.1	22	2.4
TB	152	TVC 659J	1.7**	21**	2.7*
TB	152	LRW 454F	2.7	20	2.3
TA	183	LE 860 LO	2.6**	32**	2.6*
TA	183	TKV 754J	2.6	18	2.1

\*\* E.P.A. Laboratory Data

\* Motor Industries Research Association

Each test vehicle met the 1972-model year emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide and 3.2 grams per mile oxides of nitrogen.

Based on the test data and other information submitted by the applicant, the staff finds that the Triumph Motor Company exhaust emission control system meets California requirements for vehicles under 6,000 pounds gross vehicle weight for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-63.

STATE OF CALIFORNIA

AIR RESOURCES BOARD

Resolution 71-64

WHEREAS, the 1971-72 fiscal year budget for the Air Resources Board provides \$438,199 for laboratory services to assist the Board in carrying out its program of air pollution control; and,

WHEREAS, the Air and Industrial Hygiene Laboratory of the State Department of Public Health has the personnel and technical capability to assist the Board in meeting its responsibilities under the Health and Safety Code;

NOW, THEREFORE, BE IT RESOLVED, that this Board authorizes the Executive Officer to execute an Interagency Agreement with the California State Department of Public Health to provide necessary laboratory services to assist the Board in meeting its 1971-72 program objectives.

September 15, 1971



State of California

AIR RESOURCES BOARD

Resolution 71-65

September 15, 1971

WHEREAS, SAAB Scania Automotive Group, Sweden, submitted an application and all required test data for approval of its emission control systems for the 1972-model vehicles;

WHEREAS, the applicant's two exhaust control systems are described as follows; and

1. Engine-modification system with major elements:
  - (1) carburetor with specified flow rates,
  - (2) distributor with specified advance characteristics and vehicle speed controlled spark advance,
  - (3) deceleration valve.
2. Fuel-injection system with major elements:
  - (1) fuel injection with deceleration fuel shutoff,
  - (2) matched ignition timing,
  - (3) recommended maintenance.

WHEREAS, the Board finds that the systems comply with the California Administrative Code, Title 13, Chapter 3, Sub-Chapter 1 and Sub-Chapter 2, Article 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Issue a certificate of approval to SAAB Scania Automotive Group, Sweden, with respect to the 1972-model vehicles, 6,000 pounds or less gross vehicle weight, as listed below:

<u>Engine Family Identification</u>	<u>Engine Size Cubic Inches</u>	<u>Vehicle Model</u>
P	103.5	Saab 95, 96 and 97
PE	114	Saab 99 EM and EA

State of California

AIR RESOURCES BOARD

1972 Emission Control Systems Approval

SAAB Scania Automotive Group

Staff Report

September 15, 1971

SAAB Scania Automotive Group has submitted a complete application for 1972-model year approval of its exhaust emission control systems for its SAAB vehicles. The applicant elected to qualify these vehicles for meeting the 1972 exhaust emission standard by the optional test procedure.

The applicant's emission control systems are a fuel-injection or engine-modification type of exhaust emission control system.

Projected Emissions of Each Test Vehicle

<u>Engine Family Identification</u>	<u>Engine Size Cubic Inches</u>	<u>Vehicle Number</u>	<u>Control System*</u>	<u>Projected Exhaust Emissions 50,000 Miles</u>		
				<u>HC-gms/mi</u>	<u>CO-gms/mi</u>	<u>NO<sub>2</sub>-gms/mi</u>
P	103.5	95/298	EM	2.7	35	2.9
	103.5	96/299	EM	2.6	28	2.3
	103.5	97/297	EM	2.1**	32**	2.0*
PE	114	99/294	FI	2.3**	18**	1.7*
	114	99/293	FI	1.6	20	2.4

\*FI = Fuel injection

EM = Engine modification

\* Independent laboratory

\*\* EPA Data

Each test vehicle met the 1972-model emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide, 3.2 grams per mile oxides of nitrogen.

Based on the test data and other information submitted by the applicant, the staff finds that the SAAB Scania Automotive Group exhaust emission control systems for vehicles less than 6,001 pounds gross vehicle weight meet California requirements for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-65.

State of California

AIR RESOURCES BOARD

Resolution 71-66

August, 1971

WHEREAS, International Harvester Company submitted an application and all required test data for approval of its exhaust emission control system for its 1972-model vehicles; and

WHEREAS, the applicant's exhaust control systems are described as follows:

- A. An engine-modification (EM) type exhaust emission control system with major elements:
  - (1) carburetor with specified flow rates,
  - (2) distributor with specified advance characteristics,
  - (3) vehicle speed controlled spark advance,
  - (4) recommended maintenance.
- B. An air injection (AI) type exhaust emission control system with major elements:
  - (1) carburetor with specified flow rates,
  - (2) distributor with specified advance characteristics,
  - (3) air pump injecting air into exhaust ports,
  - (4) vehicle speed controlled spark advance,
  - (5) recommended maintenance.

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Article 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Issue a resolution of approval to International Harvester with respect to its 1972-model vehicles, 6,000 pounds or less gross vehicle weight, as listed below:

Engine Family 6-258 with EM

Engine Size: 258 cubic inches

Scout II (4 x 2), Scout II (4 x 4), 1010, 1110 (4 x 2), 1110 (4 x 4), 1210 (4 x 2).

Engine Family V-304

Engine Size: 304 cubic inches

Proposed

State of California

AIR RESOURCES BOARD

Resolution 71-66-A

November 17, 1971

WHEREAS, International Harvester Company submitted an application and all required test data for approval of the exhaust emission control system for its 1972-model vehicles;

WHEREAS, the applicant's exhaust control system is described as follows:

An air injection (AI) type exhaust emission control system with major elements:

- (1) carburetor with specified flow rates,
- (2) distributor with specified advance characteristics,
- (3) air pump injecting air into exhaust ports,
- (4) vehicle speed controlled spark advance,
- (5) recommended maintenance; and

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Article 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Issue a resolution of approval to International Harvester with respect to its 1972-model vehicles, 6,000 pounds or less gross vehicle weight, as listed below:

Engine Family V-345 with air injection

Models: 1010 automatic-Travelall, 1110 (4x4) automatic-Travelall,  
1210 (4x2) automatic-Travelall, 1210 (4x4) automatic-Travelall.

State of California

AIR RESOURCES BOARD

Staff Report

1972 Emission Control System Approval

International Harvester Company

November 17, 1971

International Harvester Company has submitted a supplementary application for 1972-model year approval of the exhaust emission control system for its V-345 engine family vehicles with automatic transmission. The applicant tested these vehicles and met the 1972 exhaust emission standards using the optional test procedure.

The applicant's exhaust emission control system is of the air-injection type.

Engine Family Identification	Engine Size Cubic Inches	Vehicle Number	Projected Emissions of Each Test Vehicle		
			Projected Exhaust Emissions		
			at 50,000 Miles		
			HC-gms/mile	CO-gms/mile	NO <sub>2</sub> -gms/mile
V-345	345	319	3.0	20	3.1
V-345	345	334	2.4	28	2.5*

\*Ethyl Confirmatory data

Each test vehicle met the 1972-model year emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide and 3.2 grams per mile oxides of nitrogen.

Confirmatory tests conducted by the Ethyl Corporation laboratory substantiate the manufacturer's data as listed above.

Based on the test data and other information submitted by the applicant, the staff finds that International Harvester Company's exhaust emission control system meets California requirements for vehicles under 6,000 pounds gross vehicle weight for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-66A.

State of California

AIR RESOURCES BOARD

Resolution 71-67

August, 1971

WHEREAS, Volkswagen of America, Inc., submitted an application and all required test data for approval of its exhaust emission control systems for the 1972-model vehicles;

WHEREAS, the applicant's exhaust control systems are described as follows:

A. Engine-modification system with major elements:

- (1) carburetor with specified flow rates and with air by-pass,
- (2) distributor with specified advance characteristics and dual-diaphragm,
- (3) throttle positioner for deceleration control,
- (4) recommended maintenance.

B. Fuel-injection system with major elements:

- (1) electronically controlled fuel injection,
- (2) distributor with specified advance characteristics and dual-diaphragm,
- (3) recommended maintenance.

C. Engine-modification and exhaust gas recirculation type system with major elements

- (1) carburetor with specified flow rates and with air by-pass,
- (2) distributor with specified advance characteristics and dual-diaphragm,
- (3) throttle positioner for deceleration control,
- (4) exhaust gas recirculation,
- (5) recommended maintenance.

D. Fuel-injection and exhaust gas recirculation type system with major elements:

- (1) electronically controlled fuel injection,
- (2) distributor with specified advance characteristics and dual-diaphragm,
- (3) exhaust gas recirculation,
- (4) recommended maintenance.

In addition to the above engine modification system items or fuel injection items, some of the items listed below are used:

- (1) intake manifold heating,
- (2) transmission controlled spark,
- (3) closing damper,
- (4) pneumatic or electrical deceleration control valve,
- (5) vehicle speed controlled spark advance.

WHEREAS, the Board finds that the systems comply with the California Administrative Code Title 13, Chapter 3, Sub-Chapter 1 and Sub-Chapter 2, Article 2, and 3:

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Issue a resolution of approval to Volkswagen of America, Inc., with respect to the 1972-model vehicles, 6,000 pounds or less gross vehicle weight, as listed below:

Engine Family 1:

Engine Size - 96.66 cubic inches

Exhaust Control System - Engine Modification;

Models: Deluxe Sedan 11, \*Karmann Ghia, \*Volkswagen Convertible 15.

Exhaust Control System - Fuel Injection;

Models: Fastback Sedan 31, Squareback Sedan 36,

Engine Family 2:

Engine Size 102.5 cubic inches;

Exhaust Control System - Engine Modification or FM with EGR:

Models: Volkswagen Station Wagon 22/24, Volkswagen Combi, Camptmobile 23,  
Volkswagen Panel Truck 21, Volkswagen Pickup, Pickup Double Cabin

Exhaust Control System - Fuel Injection or FI with EGR:

Models: \*\* Sedan 41/42, \*\*Squareback Sedan 46 Roadster 914/4.

\* Approved both with or without throttle positioner system

\*\* Approved both with and without deceleration control valve

State of California

AIR RESOURCES BOARD

Resolution 71-67A

November 17, 1971

WHEREAS, Volkswagen of America, Inc., submitted an application and all required test data for approval of its exhaust emission control systems for the 1972-model vehicles;

WHEREAS, the applicant's exhaust control systems are described as follows:

A. Engine-modification system with major elements:

- (1) carburetor with specified flow rates and with air by-pass,
- (2) distributor with specified advance characteristics and dual-diaphragm,
- (3) throttle positioner for deceleration control,
- (4) recommended maintenance.

B. Fuel-injection system with major elements:

- (1) electronically-controlled fuel injection,
- (2) distributor with specified advance characteristics and dual-diaphragm,
- (3) recommended maintenance.

C. Engine-modification and exhaust gas recirculation type system with major elements:

- (1) carburetor with specified flow rates and with air by-pass,
- (2) distributor with specified advance characteristics and dual-diaphragm,
- (3) exhaust gas recirculation,
- (4) recommended maintenance.

D. Fuel-injection and exhaust gas recirculation type system with major elements:

- (1) electronically-controlled fuel injection,
- (2) distributor with specified advance characteristics and dual-diaphragm,
- (3) exhaust gas recirculation,
- (4) recommended maintenance.

In addition to the above engine modification system items or fuel injection items, some of the items listed below are used:

- (1) intake manifold heating,
- (2) transmission-controlled spark,



- (3) closing damper,
- (4) pneumatic or electrical deceleration control valve,
- (5) vehicle speed controlled spark advance.

WHEREAS, the Board finds that the systems comply with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Articles 2, and 3:

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Rescinds previously adopted Resolution 71-67; and

Approves the exhaust emission control device of Volkswagen of America, Inc., for its 1972-model vehicles, 6,000 pounds or less gross vehicle weight, as listed below:

Engine Family 1:

Engine Size - 96.66 cubic inches -

Exhaust Control System - Engine Modification or EM with EGR

Models: \*Deluxe Sedan 11, \*Karmann Ghia, \*Volkswagen Convertible 15.

Exhaust Control System - Fuel Injection or F.I. with EGR

Models: \*\*Fastback Sedan 31, \*\*Squareback Sedan 36.

Engine Family 2:

Engine Size 102.5 cubic inches -

Exhaust Control System - Engine Modification

Models: \*\*Volkswagen Station Wagon 22/24, \*\*Volkswagen Combi,  
\*\*Campmobile 23, \*\*Volkswagen Panel Truck 21, \*\*Volkswagen  
Pickup Double Cabin.

Exhaust Control System - Fuel Injection

Models: \*\*Sedan 41/42, \*\*Squareback Sedan, \*\*Roadster 914/4.

\* Approved both with or without throttle positioner system.

\*\* Approved both with and without deceleration control valve.

State of California

AIR RESOURCES BOARD

Staff Report

1972 Emission Control System Approval

Volkswagen of America, Inc.

November 17, 1971

This staff report is a supplement to the original staff report dated August 1971. Additional clarification of the manufacturer's vehicle lineup has been received which has necessitated a revision to the original approval resolution 71-67. The clarification pertained to vehicles which incorporate either the throttle positioner system or deceleration control valve in combination with the basic emission control system. The changes incorporated in the resolution are supported by a statement from the manufacturer and have been confirmed by the staff.

State of California

AIR RESOURCES BOARD

Resolution 71-68

August, 1971

WHEREAS, Jeep Corporation, a subsidiary of American Motors, submitted an application and all test data for 1972 California approval of exhaust emission control systems for vehicles greater than 6,000 pounds gross vehicle weight; and

WHEREAS, the applicant's exhaust control system is described as follows:

Air injection system with major elements:

- (1) rotary-vane air pump,
- (2) air injection into each exhaust port,
- (3) carburetor with specified flow rates,
- (4) distributor with specified advance characteristics,
- (5) transmission controlled spark advance,
- (6) recommended maintenance.

WHEREAS, the Board finds that the systems comply with the California Administrative Code, Title 13, Chapter 3, Sub-Chapter 1 and Sub-Chapter 2, Article 2;

NOW, THEREFORE, BE IT RESOLVED, That this Board under the powers and authority granted in Chapter 4, commencing at Section 39080, Division 26 of the Health and Safety Code,

Issue a resolution of approval to Jeep Corporation with respect to 1972-model vehicles greater than 6,000 pounds gross vehicle weight, for the following engine size:  
360 cubic inches.

State of California

AIR RESOURCES BOARD

Staff Report

Exhaust Emission Control System Approval  
1972-Model Vehicles Over 6,000 Pounds Gross Vehicle Weight

JEEP CORPORATION

August, 1971

Jeep Corporation, a subsidiary of American Motors, has submitted an application containing all of the information required by the California Exhaust Emission Test Procedure for engines to be used in their 1972-model vehicles over 6,000 pounds gross vehicle weight.

Their 1972 exhaust emission control system is the same as that approved for 1971.

The applicant utilizes an air injection type system.

Emission Data of Each Test Engine  
Projected to 1,500 Hours

<u>Engine Size</u> <u>Cubic Inches</u>	<u>Test Engine</u> <u>Number</u>	<u>Projected Emission Level</u> <u>at 1,500 Hours</u>	
		<u>Hydrocarbons, ppm</u>	<u>Carbon Monoxide, %</u>
360	72EMHD-1	176	0.8

The emission data engine met the emission standards of 180 ppm hydrocarbon and 1.0% carbon monoxide.

Based on the test data and other information submitted by the applicant, the staff finds that the Jeep Corporation exhaust control system for vehicles over 6,000 pounds gross vehicle weight meets California requirements for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-68.

State of California

AIR RESOURCES BOARD

Resolution 71-69

August, 1971

WHEREAS, Austin-Morris Division of British Leyland, Ltd., England has submitted an application and all required test data for approval of its emission control system for the 1972-model vehicles;

WHEREAS, the applicant's emission control system is described as follows:

A. Air-injection type exhaust emission control system with major elements:

- (1) rotary-vane air pump,
- (2) air injection into each exhaust port and anti-backfire valve,
- (3) distributor with specified advance characteristics,
- (4) carburetor with specified flow rates,
- (5) recommended maintenance; and

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Articles 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080 of the Health and Safety Code,

Issue a resolution of approval to the Austin-Morris Division of British Leyland, Ltd., with respect to the 1972-model vehicles, 6,000 pounds or less gross vehicle weight,

<u>Engine Family Identification</u>	<u>Engine Size Cubic Inches</u>	<u>Vehicle Models</u>
A	77.9	M. G. Midget
B	109.6	MGB Sports MGB G.T.

State of California

AIR RESOURCES BOARD

Staff Report

1972 Emission Control Systems Approval

British Leyland, Ltd., (Austin-Morris Div.)

August, 1971

The Austin-Morris Division of British Leyland, Ltd. has submitted an application for approval of the emission control systems to be used on its 1972-model MG and MGB vehicles. The applicant elected to qualify these vehicles for meeting the 1972 exhaust emission standards by the optional test procedure.

The applicant's emission control system is an air-injection type.

Projected Emissions of Each Test Vehicle

Engine Family Identification	Engine Size Cubic Inches	Vehicle No.	Projected Exhaust Emissions at 50,000 Miles		
			HC-gms/mi	CO-gms/mi	NO <sub>2</sub> -gms/mi
A	77.9	M 72/2	1.6**	18**	2.8*
		M 72/1	2.7	23	1.7
B	109.6	B 72/2	1.4**	14**	2.8*
		B 72/1	2.0	26	2.5

\*\*E.P.A. Laboratory Data

\* Motor Industries Research Association

Each test vehicle met the 1972-model year emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide and 3.2 grams per mile oxides of nitrogen.

Based on the test data and other information submitted by the applicant, the staff finds that the Austin-Morris exhaust emission control system meets California requirements for vehicles under 6,000 pounds gross vehicle weight for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-69.

State of California

AIR RESOURCES BOARD

Resolution 71-70

August, 1971

WHEREAS, American Motors Corporation has submitted an application and all test data for California approval of the emission control systems for its 1972-model vehicles;

WHEREAS, the applicant's emission control systems are described as follows:

- A. Air-injection type exhaust emission control system, for vehicles with manual transmission, with major elements:
  - (1) rotary-vane air pump,
  - (2) air injection into each exhaust port,
  - (3) carburetor with specified flow rates,
  - (4) distributor with specified advance characteristics,
  - (5) increased valve overlap,
  - (6) transmission-controlled spark advance,
- B. Engine-modification type exhaust emission control system, for vehicles with automatic transmissions, with major elements:
  - (1) carburetor with specified flow rates,
  - (2) distributor with specified advance characteristics,
  - (3) modified camshaft for delayed exhaust valve closure,
  - (4) transmission controlled spark advance,
  - (5) recommended maintenance; and

WHEREAS, the Board finds that the systems comply with the California Administrative Code, Title 13, Chapter 3, Sub-Chapter 1 and Sub-Chapter 2, Article 2 and 3;

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Issue a resolution of approval to American Motors Corporation with respect to the 1972-model vehicles, 6,000 pounds or less gross vehicle weight as listed below:

Engine Family I - 232/258

Engine Size - 232 cubic inches

Models: Hornet, Gremlin, Javelin, Matador, Matador Wagon.

Engine Size - 258 cubic inches

Models: Hornet, Gremlin, Javelin, Matador, Matador Wagon, Ambassador.

State of California  
AIR RESOURCES BOARD

Staff Report

1972 Emission Control System Approval

American Motors Corporation

August, 1971

American Motors Corporation has submitted a complete application for 1972-model year approval of exhaust emission control systems for its 232/258, 304 and 360/401 engine family vehicles. The applicant tested these vehicles and met the 1972 exhaust emission standards using the optional test procedures.

The applicant's exhaust emission control systems are of the air-injection or engine modification type.

Projected Emissions of Each Test Vehicle

Engine Family Identification	Emission Control System*	Engine Size Cubic Inches	Vehicle Number	Projected Exhaust Emission at 50,000 Miles		
				HC-gms/mi	CO-gms/mi	NO <sub>2</sub> -gms/mi
I-232/258	EM	232	D10-12L	2.2	33	2.7
I-232/258	EM	232	D14- 9L	1.8	29	1.8
I-232/258	EM	258	D11-17K	1.4	25	3.1
II-304	EM	304	D11-18D	3.1	27	2.8
II-304	EM	304	D18-17D	2.5	25	2.5
II-304	AI	304	D17-23D	2.5	34	2.1
III-360/401	EM	360	D17-24R	2.3	25	1.9
III-360/401	EM	360	D18-18R	2.5	26	1.8**
III-360/401	AI	360	D17-22R	1.9	33	1.5

\* EM = Engine Modification; AI = Air Injection

\*\* Ethyl Corporation Confirmatory Test

Each test vehicle met the 1972-model year emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide and 3.2 grams per mile oxides of nitrogen.

Based on the test data and other information submitted by the applicant, the staff finds that American Motors Corporation exhaust emission control systems for its I-232/258, II-304, and III-360/401 engine family vehicles meet California requirements for vehicles of 6,000 pounds gross vehicle weight or less for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-70.



State of California

AIR RESOURCES BOARD

Resolution 71-70-A

August, 1971

WHEREAS, Jeep Corporation has submitted an application and all test data for California approval of the emission control systems for its 1972-model vehicles;

WHEREAS, the applicant's emission control systems are the same as its parent company's American Motors, and are described as follows:

- A. For engine families II-304 and III-360/401 with manual transmission only:  
Air-injection type exhaust emission control system with major elements:
  - (1) rotary-vane air pump,
  - (2) air injection into each exhaust port,
  - (3) carburetor with specified flow rates,
  - (4) distributor with specified advance characteristics,
  - (5) increased valve overlap,
  - (6) transmission-controlled spark advance,
- B. For engine family I-232/258; and engine families II-304 and II-360/401 with automatic transmission only:  
Engine-modification type exhaust emission control system with major elements:
  - (1) carburetor with specified flow rates,
  - (2) distributor with specified advance characteristics,
  - (3) modified camshaft for delayed exhaust valve closure,
  - (4) transmission controlled spark advance,
  - (5) recommended maintenance; and

WHEREAS the Board finds that the systems comply with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Article 2 and 3;

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39030, of the Health and Safety Code,

Issue a resolution of approval to Jeep Corporation with respect to the 1972-model vehicles, 6,000 pounds or less gross vehicle weight as listed below:

Engine Family I - 232/258

Engine Size - 232 cubic inches

Models: Universal, Jeepster

Engine Size - 258 cubic inches

Models: Universal, Jeepster, Wagoneer, Gladiator.

Engine Family II

Engine Size - 304 cubic inches

Models: Universal, Jeepster, Wagoneer, Gladiator.

Engine Family III - 360/401

Engine Size - 360 cubic inches

Models: Wagoneer, Gladiator.

State of California

AIR RESOURCES BOARD

Staff Report

1972 Emission Control System Approval

Jeep Corporation

August, 1971

Jeep Corporation has submitted an application, supplementing the application of its parent company, American Motors, for approval of additional vehicles to the previously approved engine families 232/258, 304, and 360/401. The applicant tested these vehicles and met the 1972 exhaust emission standards using the optional test procedures.

The applicant's exhaust emission control systems are of the air-injection or engine modification type.

Projected Emissions of Each Test Vehicle

Engine Family Identification	Emission Control System*	Engine Size Cubic Inches	Vehicle Number	Projected Exhaust Emission at 50,000 Miles		
				HC-gms/mi	CO-gms/mi	NO <sub>2</sub> -gms/mi
II-304	AI	304	562	2.8	21	2.3**
III-360/401	EM	360	096	2.9	26.3	2.5**

\* EM = Engine Modification

AI = Air Injection

\*\* Ethyl Corporation Confirmatory Test

Each test vehicle met the 1972-model year emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide and 3.2 grams per mile oxides of nitrogen.

Based on the test data and other information submitted by the applicant, the staff finds that Jeep Corporation exhaust emission control systems for its I-232/258, II-304, and III-360/401 engine family vehicles meet California requirements for vehicles of 6,000 pounds gross vehicle weight or less for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-70-A.

State of California  
AIR RESOURCES BOARD

Resolution 71-71

August, 1971

WHEREAS, Dr. Ing. h.c.F. Porsche KG, has submitted an application and all required test data for approval of its emission control systems for 1972-model vehicles - engine family "1"; and

WHEREAS, the applicant's emission control system is described as follows:

Fuel-injection system with major elements:

- (1) mechanical injection pump,
- (2) three dimensional cam (fuel quantity control),
- (3) electro-mechanical fuel shut-off control (during deceleration),
- (4) distributor with specified advance characteristics,
- (5) capacitive-discharge ignition system,
- (6) recommended maintenance.

WHEREAS, the Board finds that the systems comply with the California Administrative Code, Title 13, Chapter 3, Sub-Chapter 1, and Sub-Chapter 2, Article 2, and 3;

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Issue a resolution of approval to Dr. Ing. h.c.F. Porsche KG, with respect to the 1972-model vehicles, 6,000 pounds or less gross vehicle weight, as listed below:

Engine Family 1

Engine size - 142.4 cubic inches

Models: 911T, 911E, 911S, 914/6T, 914/6E and 914/6S

State of California

AIR RESOURCES BOARD

Staff Report

1972 Emission Control Systems Approval

Dr. Ing h.c.F. Porsche KG

August, 1971

Dr. Ing. h.c.F. Porsche KG has submitted a complete application for 1972-model year approval of its exhaust emission control system for its engine family "1" vehicles. The applicant tested these vehicles and met the 1972 exhaust emission standards using the optional test procedure.

The applicant's exhaust emission control system is of the fuel injection type.

Projected Emissions of Each Test Vehicle

Engine Family Identification	Engine Size Cubic Inches	Vehicle Number	Projected Exhaust Emissions at 50,000 Miles		
			HC-gms/mile	CO-gms/mile	NO <sub>2</sub> -gms/mile
1	142.4	911 210 0011	2.3*	25*	1.9**
1	142.4	911 210 0012	2.6*	20*	1.6**
1	142.4	911 230 0011	2.6*	22*	1.0**
1	142.4	911 012 1386	2.9	15	3.2

\* EPA Confirmatory Test

\*\* Scott Confirmatory Test

The applicant stated that the engines and transmission combinations of their vehicles have been designed to operate with 91 Research Octane Number fuel, and that no adverse driveability effects will result from use of such fuel.

Each test vehicle met the 1972-model year emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide and 3.2 grams per mile oxides of nitrogen.

Confirmatory tests conducted at the Environmental Protection Agency Laboratory and Olson Laboratory substantiate the manufacturer's data.

Based on the test data and other information submitted by the applicant, the staff finds that Dr. Ing. h.c.F. Porsche KG exhaust emission control system meets California requirements for vehicles 6,000 pounds or less gross vehicle weight for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-71.

State of California

AIR RESOURCES BOARD

Resolution 71-72

September 15, 1971

WHEREAS, Emission Control Technology, Inc. and Caleb V. Swanson, Jr. applied for accreditation of an exhaust emission control system described in the staff report dated September 15, 1971 for 1955 through 1965 year model light-duty used vehicles of engine size classifications d, e, and f;

WHEREAS, Emission Control Technology, Inc. and Caleb V. Swanson, Jr. assigned all of their right, title, and interest in said system, said application and related test data, to Air Quality Products, Inc., a California Corporation, which corporation has been substituted as the applicant for accreditation of said system;

WHEREAS, the Board has determined that the data submitted indicates that the system meets the hydrocarbon and oxides of nitrogen standards set forth in Health and Safety Code Section 39107 and the Board's further requirements contained in Title 13, California Administrative Code, Chapter 3, Subchapter 2, Articles 2 and 3;

WHEREAS, no device or system has been submitted to the Board which meets all three pollutant standards of Section 39107, viz., hydrocarbons, carbon monoxide and oxides of nitrogen;

WHEREAS, the personal guarantee of Joseph F. Arroyo gives Air Quality Products Inc. sufficient financial strength to produce and distribute the emission control system; and

WHEREAS, the Board has reservations about data submitted as to the system's reduction of emissions, durability and effect on drivability;

NOW, THEREFORE, BE IT RESOLVED, that the emission control system submitted by Air Quality Products Inc. is hereby accredited pursuant to the provisions of Chapter 4, Part 1, Division 26 of the Health and Safety Code for 1955 through 1965 year model used light-duty vehicles for engines of size classifications d, e, and f, on the terms and conditions set forth in the application of Air Quality Products Inc.; and

BE IT FURTHER RESOLVED, that the installation of the Air Quality Product's system shall become mandatory pursuant to Chapter 4 when the Board finds that the following conditions have been satisfied:

1. The Board's reservations as to the system's reduction of emissions, durability, and effect on drivability are removed.

Proposed

State of California

AIR RESOURCES BOARD

Resolution 71-72A

December 15, 1971

WHEREAS, Emission Control Technology, Inc. and Caleb V. Swanson, Jr. applied for accreditation of an exhaust emission control system described in the staff report dated September 15, 1971 for 1955 through 1965 year model light-duty used vehicles of engine size classifications d, e, and f;

WHEREAS, Emission Control Technology, Inc. and Caleb V. Swanson, Jr. assigned all of their rights, title, and interest in said system, said application and related test data, to Air Quality Products, Inc. a California Corporation, which corporation has been substituted as the applicant for accreditation of said system;

WHEREAS, Air Quality Products Inc. has amended its application to include for accreditation of an exhaust emission control system described in the supplementary staff report dated December 15, 1971 for 1955 through 1965 year model used light-duty vehicles of engine size classifications b and c.

WHEREAS, the Board has determined that the data submitted indicates that the system meets the hydrocarbon and oxides of nitrogen standards set forth in Health and Safety Code Section 39107 and the Board's further requirements contained in Title 13, California Administrative Code, Chapter 3, Subchapter 2, Articles 2 and 3;

WHEREAS, no device or system has been submitted to the Board which meets all three pollutant standards of Section 39107, viz., hydrocarbons, carbon monoxide and oxides of nitrogen; and

WHEREAS, the personal guarantee of Joseph F. Arroyo gives Air Quality Products Inc. sufficient financial strength to produce and distribute the emission control system;

NOW, THEREFORE, BE IT RESOLVED, that resolution 71-72 is rescinded and that the emission control system submitted by Air Quality Products Inc. is hereby accredited pursuant to the provisions of Chapter 4, Part 1, Division 26 of the Health and Safety Code for 1955 through 1965 year model used light-duty vehicles for engines of size classifications b, c, d, e, and f, on the terms and conditions set forth in the application of Air Quality Products Inc.;

BE IT FURTHER RESOLVED, that the installation of the Air Quality Product's system shall become mandatory pursuant to Chapter 4 when the Board finds that the device is available for installation.

State of California

AIR RESOURCES BOARD

Resolution 71 - 73

September 15, 1971

WHEREAS, the Board adopted, pursuant to Section 39298 of the Health and Safety Code, guidelines for the regulation and control of agricultural burning into Title 17, California Administrative Code on March 17, 1971; and

WHEREAS, Section 39298.8 of the Health and Safety Code requires Air Pollution Control Districts to adopt an implementation plan consistent with guidelines adopted by the Board for regulation and control of agricultural burning; and

WHEREAS, Section 80110 of the California Administrative Code permits county and regional districts that have large, remote and sparsely populated areas at altitudes between 2000 and 4000 feet above mean sea level to apply to the Board for exemptions from the guidelines; and

WHEREAS, San Luis Obispo County has requested by letter of July 13, 1971 an area exemption; and

WHEREAS, it is determined that the Carrizo Plain is a large, remote and sparsely populated area, located between 2000 and 4000 feet above mean sea level;

NOW, THEREFORE, BE IT RESOLVED, that the area within San Luis Obispo County east of 120° 7.5' longitude, south of 35° 30' N latitude, and north of 35° 00' N latitude be exempted from the agricultural burning guidelines as adopted into Title 17, California Administrative Code.

State of California

AIR RESOURCES BOARD

RESOLUTION 71-74

September 15, 1971

WHEREAS, Section 39296 of the Health and Safety Code prohibits use of open fires for the purpose of disposal of petroleum wastes, demolition debris, tires, tar, trees, wood waste, or other combustible or flammable solid or liquid waste; or for metal salvage or burning of automobile bodies after December 31, 1971; and

WHEREAS, Section 39297.4 of the Health and Safety Code directs the Air Resources Board to permit a city, city and county, or county to use open outdoor fires for a limited time only, in its operation of a solid waste dump, upon the finding that because of sparse population in the geographical area and economic and technical difficulties, the solid waste dump should be so operated; and

WHEREAS, there are approximately three hundred and seventy-nine city and county dumps using open burning as a means of solid waste disposal; and

WHEREAS, the Board at its May 19, 1971 meeting adopted guidelines for receiving applications from cities and counties for permission to continue their open burning dumps;

NOW, THEREFORE, BE IT RESOLVED, That the Air Resources Board's policy for approving requests for limited time extensions to cities and counties to continue to use open fires for the purpose of disposal of solid waste is:

1. Qualification for time extension based on population density -

- (a) If the open burning dump is in a location where the population density is less than 100 people per square mile within a 5 mile radius, it shall be considered to be in a sparsely populated area.
- (b) If the open burning dump is in a location where the population density is less than 4 people per square mile within a 20 mile radius, it shall be considered to be in an extremely sparsely populated area.



2. Limited time extension shall be not more than -

- (a) One year for dumps located in a geographical area of sparse population. Additional time extensions on a year-by-year basis may be authorized based on evaluation of information provided by the applicants. Approval for each succeeding year shall be based on demonstrable and satisfactory progress made in phasing out the use of open fires in dumps by the end of the previous year. The total extension will be no more than three years.
- (b) Two years for dumps located in a geographical area of extremely sparse population. Additional time extensions on a year-by-year basis may be authorized based on evaluation of information provided by the applicants. Approval for each succeeding year shall be based on demonstrable and satisfactory progress made in phasing out the use of open fires in dumps by the end of the previous year. The total extension will be no more than five years.
- (c) The Board will use the above definitions of sparse population and extremely sparse population as guidelines. For extension of time limits to a dump not within the above guidelines, a city or county shall present with its application detailed information justifying the extension.

State of California

AIR RESOURCES BOARD

Resolution 71-75

September 15, 1971

WHEREAS, Section 39052.5 of the Health and Safety Code authorizes the State Air Resources Board to adopt more stringent standards for emissions from new motor vehicles;

WHEREAS, Section 39052(k) requires the Air Resources Board to adopt test procedures specifying the manner in which new motor vehicles shall be approved; and

WHEREAS, a public hearing and other proceedings have been held in accordance with the provisions of the Administrative Procedure Act (Government Code, Title 2, Division 3, Part 1, Chapter 4.5);

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board hereby adopts regulations in Title 13, Chapter 3, California Administrative Code, as follows:

Adopts Section 1946 to read:

1946. Exhaust Emissions (1973 through 1976 Model Vehicles Under 6,001 lbs. G.V.W.). The State Air Resources Board finds compliance with the standards for exhaust emissions set forth below to be necessary and technologically feasible for 1973 through 1976 model year gasoline-powered motor vehicles under 6,001 lbs. G.V.W. In accordance with this finding, the standards for such vehicles are: Exhaust Emissions from Gasoline-Powered Engines in 1973 through 1976 Model Year Vehicles Under 6,001 lbs. G.V.W. determined by Constant Volume Sampling test procedures given in Subchapter 2, Section 2109(i) and 2208(e) shall not exceed:

- |                  |  |
|------------------|--|
| (a) 1973:        | (1) Hydrocarbons 3.2 grams per mile                          |
|                  | (2) Carbon Monoxide 39 grams per mile                        |
|                  | (3) Oxides of Nitrogen (NO <sub>2</sub> ) 3.0 grams per mile |
| (b) 1974:        | (1) Hydrocarbons 3.2 grams per mile                          |
|                  | (2) Carbon Monoxide 39 grams per mile                        |
|                  | (3) Oxides of Nitrogen (NO <sub>2</sub> ) 2.0 grams per mile |
| (c) 1975 & 1976: | (1) Hydrocarbons 1.0 grams per mile                          |

- (2) Carbon Monoxide 24 grams per mile
- (3) Oxides of Nitrogen (NO<sub>2</sub>) 1.5 grams per mile

Adopts Subsection (i) of Section 2109 to read:

- (i) The test procedures for determining compliance with Exhaust Emission Standards specified in Section 1946, Title 13, California Administrative Code, are those set forth in "California Exhaust Emission Standards and Test Procedures for 1973 through 1976 Models Gasoline-Powered Motor Vehicles Under 6,001 lbs. G.V.W." adopted by the Air Resources Board September 15, 1971.

Adopts Subsection (e) of Section 2208 to read:

- (e) The test procedures for determining compliance with Exhaust Emission Standards (Nitrogen Oxides) specified in Section 1946, Title 13, California Administrative Code, are those set forth in "California Exhaust Emission Standards and Test Procedures for 1973 through 1976 Models Gasoline-Powered Motor Vehicles Under 6,001 lbs. G.V.W." adopted by the Air Resources Board on September 15, 1971.

BE IT FURTHER RESOLVED, that the test procedures entitled "California Exhaust Emission Standards and Test Procedures for 1973 through 1976 Models Gasoline-Powered Motor Vehicles Under 6,001 Pounds Gross Vehicle Weight," are hereby adopted.

State of California  
AIR RESOURCES BOARD

Resolution 71-76

September, 1971

WHEREAS, Fuji Heavy Industries, submitted an application and all required test data for approval of its emission control system for its 1972-model light-duty vehicles;

WHEREAS, the applicant's exhaust control system is described as an engine-modification type with major elements for the A6 engine family vehicles:

- (1) carburetor with specified flowrates and air bypass with servo diaphragm,
- (2) vacuum control valve,
- (3) vacuum retarding distributor with specified advance characteristics,
- (4) recommended maintenance; and

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Subchapter 2, Articles 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Issue a resolution of approval to Fuji Heavy Industries, with respect to its 1972-model vehicles, 6,000 pounds or less gross vehicle weight, of the engine family listed below:

<u>Engine Family</u>	<u>Control System</u>	<u>Engine Size Cubic Inches</u>	<u>Vehicle Model</u>
A6	EM	77.32	Subaru 1300

State of California

AIR RESOURCES BOARD

Staff Report

1972 Emission Control Systems Approval

Fuji Heavy Industries

September, 1971

Fuji Heavy Industries has submitted a complete application for 1972-model year approval of its exhaust emission control system for its light-duty vehicles. The applicant elected to qualify these vehicles for meeting the 1972 exhaust emission standards by the optional test procedure.

The applicant's exhaust emission control system is of the engine modification type.

Projected Emissions of Each Test Vehicle

Engine Family Identification	Engine Size Cubic Inches	Vehicle Number	Control System	Projected Exhaust Emissions at 50,000 Miles		
				HC-gms/mi.	CO-gms/mi.	NO <sub>2</sub> -gms/mi.
A6	77.32	A14L-200006	EM	3.1*	17*	1.9**
A6	77.32	A14L-001002	EM	2.6	17	2.0

EM - Engine Modification

\*Environmental Protection Agency Data

\*\*Hitachi Laboratory Data

Each test vehicle met the 1972-model year emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide, and 3.2 grams per mile oxides of nitrogen.

Based on the test data and other information submitted by the applicant, the staff finds that Fuji Heavy Industries exhaust emission control system meet California requirements for vehicles under 6,000 pounds gross vehicle weight for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-76.

State of California  
AIR RESOURCES BOARD

Resolution 71-77

September 15, 1971

WHEREAS, the Environmental Technology Division of Dresser Industries, 1702 McGaw, Santa Ana, California 92705, has applied for a permit to test an experimental exhaust emission control system on a motor vehicle;

WHEREAS, it is intended that the system would provide control of hydrocarbons, carbon monoxide, and nitrogen oxides on both new and used vehicles;

WHEREAS, the system operates as a control method for the introduction of fuel and air into the intake manifold; and

NOW, THEREFORE, BE IT RESOLVED, That the Environmental Technology Division of Dresser Industries is hereby granted a permit for the testing of an experimental emission control device on a motor vehicle for a period of one year from the above date.

State of California

AIR RESOURCES BOARD

Resolution 71-78

September 15, 1971

WHEREAS, Section 39009.3 of the Health and Safety Code requires the Air Resources Board to establish a low emission standard; and

WHEREAS, the Board finds that not more than 50 percent of the 1972 certification vehicles would comply with a low emission standard of 2.9 grams per mile hydrocarbons, 36 grams per mile carbon monoxide, and 2.9 grams per mile oxides of nitrogen.

NOW, THEREFORE, BE IT RESOLVED, That the low emission standards pursuant to Health and Safety Code Section 39009.3 are:

(a) 1972-model year standard

Hydrocarbons: 2.9 grams per mile

Carbon Monoxide: 36 grams per mile

Oxides of Nitrogen: 2.9 grams per mile

State of California

AIR RESOURCES BOARD

Staff Report on Low Emission Standards (H&S Section 39009.3)

September 15, 1971

In 1968, the Legislature passed Section 39009.3 of the Health and Safety Code and Section 14808.1 of the Government Code:

39009.3 As used in this part and in Section 14808.1 of the Government Code, the low emission standard is an emission standard more stringent than the approval test standard. In establishing the low emission standard, the board shall attempt to insure that no more than 50 percent of the new motor vehicles sold and registered in California that year would be able to comply with the low emission standard.

14808.1 In establishing bid specifications for the purchase of motor vehicles and in determining the lowest responsible bidder, consideration shall be given by the state to the low emission test results of such vehicles as determined by the State Air Resources Board pursuant to Section 39052 of the Health and Safety Code. The state shall purchase low emission test vehicles insofar as the cost of those vehicles do not exceed the cost of vehicles which would otherwise be purchased for state use by 10 percent except for the following vehicles:

- (a) Vehicles used by the Department of the California Highway Patrol as patrol cars.
- (b) Vehicles which are used in other special ways so as to render the low emission requirements impractical.

The low-emission standard pursuant to Section 39009.3 was derived as follows:

All the vehicles in the 1972-model approval test fleets of the American vehicle manufacturers were listed in ascending order to total emissions. From this list, the low emission standard was chosen so that no more than 50 percent of the approved vehicles would be able to comply with all three standards. The values used for each engine family are those which will appear on the required emission decals of vehicles sold in California. The emission levels which most closely approached 50% compliance (42% compliance) were 2.9 grams per mile hydrocarbons and 36 grams per mile carbon monoxide and 2.9 grams per mile oxides of nitrogen. The engine families which have approval emission numbers below these levels are listed below:

Manufacturer

American Motors

Engine Family III - 360/401

Engine size - 360 cubic inches

Vehicle Models: Hornet, Javelin, Matador, Ambassador, Ambassador Wagon.

Engine size - 401 cubic inches

Vehicle Models: Javelin, Matador, Ambassador, Ambassador Wagon.



Engine Families Meeting Low Emission Standards of 2.9 Grams per Mile Hydrocarbons,  
36 Grams per Mile Carbon Monoxide, and 2.9 Grams per Mile Oxides of Nitrogen

Manufacturer

Chrysler Corporation

Engine Family - RG

Engine size - 198 cubic inches

Vehicle Models: Valiant, Duster, Dart.

Engine size - 225 cubic inches

Vehicle Models: Valiant, Dart, Barracuda  
Challenger, Satellite, Coronet-  
Charger, Fury, Dodge, Dodge Trucks  
(B1, B2, B3, D1, W1).

Engine Family - B

Engine size - 400 cubic inches

Vehicle Models: Satellite, Coronet-Charger, Fury,  
Dodge, Chrysler, Dodge Truck D100.

Engine Family - RB

Engine Size - 440 cubic inches

Vehicle Models: Fury, Dodge, Chrysler, Imperial,  
Satellite, Coronet-Charger.

Ford Motor Company

Engine Family - 240

Engine Size - 240 cubic inches

Vehicle Models: E-100, E-200, E-300, F-100.

Engine Family - 351C-2V

Engine Size - 351 cubic inches

Vehicle Models: Mustang, Cougar, Torino, Montego, Ford, Mercury.

Engine Family - 360-390

Engine Size - 360 cubic inches

Vehicle Models: F-100.

Engine Family - 400

Engine Size - 400 cubic inches

Vehicle Models: Ford, Mercury, Torino, Montego, Thunderbird.

General Motors Corporation

Engine Family - GM-101

Engine Size - 140 cubic inches

Chevrolet Division:

Vehicle Models: Vega 2300, Vega 2300 Sedan, Vega 2300 Coupe,  
Vega 2300 Panel Express, Vega 2300 Kammback Wagon

Engine Families Meeting Low Emission Standards of 2.9 Grams per Mile Hydrocarbons,  
36 Grams per Mile Carbon Monoxide, and 2.9 Grams per Mile Oxides of Nitrogen

Manufacturer

General Motors Corporation (Continued)

Engine Family - GM-104

Engine Size - 350 cubic inches

Chevrolet Division:

Vehicle Models: Nova, Camaro, Chevelle, Malibu,  
El Camino, El Camino Custom, Nomad  
Greenbriar, Concours, Concours Estate  
Wagon, Monte Carlo, Biscayne, Bel Air,  
Impala, Impala Custom, Brookwood, Townsman,  
Kingswood, Corvette, Chevy Van, Sportvan,  
Beauville Sportvan, Blazer, Conventional  
Truck, Suburban/Carryall.

Pontiac Division:

Vehicle Model: Ventura II

GMC Division:

Vehicle Models: Van Dura, Rally Wagon, STX, Jimmy, Sprint.

Engine Size - 400 cubic inches

Chevrolet Division:

Vehicle Models: Biscayne, Bel Air, Impala, Impala Custom,  
Caprice, Brookwood, Townsman, Kingswood  
Estate.

Engine Family - GM-201

Engine Size - 350 cubic inches

Pontiac Division:

Vehicle Models: LeMans, LeMans Luxury, LeMans Sport,  
LeMans Station Wagon, Firebird, Esprit,  
Formula, and Ventura II.

Engine Size - 400 cubic inches

Pontiac Division:

Vehicle Models: LeMans, LeMans Luxury, LeMans Sport,  
LeMans Station Wagon, Firebird, Esprit,  
Catalina and Safari.

Engine Size - 455 cubic inches

Pontiac Division:

Vehicle Models: Catalina, Safari, Grand Safari, and Bonneville.

Engine Family - GM-301

Engine Size - 350 cubic inches

Oldsmobile Division:

Vehicle Models: F-85, Outlass, Outlass S Coupe, Outlass Cruiser,  
Outlass Supreme, Vista Cruiser, Delta 88,  
Delta 88 Royale.

Engine Families Meeting Low Emission Standards of 2.9 Grams per Mile Hydrocarbons,  
36 Grams per Mile Carbon Monoxide, and 2.9 Grams per Mile Oxides of Nitrogen

Manufacturer

General Motors Corporation (Continued)

Engine Family - GM-402

Engine Size - 455 cubic inches

Buick Division:

Vehicle Models: Electra, LeSabre, Riviera, Centurion, Riviera GS,  
GS 455, GS Stage 1, Estate Wagon.

International Harvester Company

Engine Family - 6-258 with EM

Engine Size - 258 cubic inches

Vehicle Models: Scout II (4 x 2), Scout II (4 x 4), 1010,  
1110 (4 x 2), 1110 (4 x 4), 1210 (4 x 2).

Engine Family - V-345 with AI

Engine Size - 345 cubic inches

Vehicle Models: Scout II (4 x 2), Scout II (4 x 4), 1010  
pickup, 1010 manual-Travelall, 1110 (4 x 2),  
1110 (4 x 4) manual-Travelall, 1110 (4 x 4)  
pickup, 1210 (4 x 2) manual-Travelall,  
1210 (4 x 4) manual-Travelall.

Engine Family - V-392 with AI

Engine Size - 392 cubic inches

Vehicle Models: 1010, 1110 (4 x 2), 1110 (4 x 4), 1210 (2 x 2)  
Travelall, 1210 (4 x 4) Travelall.

Jeep Corporation

Engine Family III - 360/401

Engine Size - 360 cubic inches

Vehicle Models: Wagoneer, Gladiator.

State of California

AIR RESOURCES BOARD

RESOLUTION 71-79

September 15, 1971

WHEREAS, Sections 60107(1) and 60109(f) of Title 17 of the California Administrative Code divide Kern County into the San Joaquin Valley Air Basin and the Southeast Desert Air Basin; and

WHEREAS, Section 39051 of the Health and Safety Code directs the ARB to divide the State into basins based on meteorological and geographical conditions; and

WHEREAS, on June 9, 1971, the Southeast Desert Air Basin Coordinating Council requested the ARB to designate that the Tehachapi area of Kern County be included within the Southeast Desert Air Basin; and

WHEREAS, there are meteorological and geographical reasons why the Tehachapi area may be in the Southeast Desert Air Basin;

NOW, THEREFORE, BE IT RESOLVED, That the legal description of the air basin boundary in Subsection (1) of Section 60107 and Subsection (f) of Section 60109, in Title 17 of the California Administrative Code, be amended to read as follows:

Beginning at the Kern-Los Angeles County boundary and running north and east along the northwest boundary of the Rancho La Liebre Land Grant to the point of intersection with the range line common to R. 15 W. and R. 16 W. San Bernardino Base and Meridian; north along the range line to the northwest corner of S. 2, T. 32 S, R. 32 E. Mount Diablo Base and Meridian; then east along the township line common to T. 32 S. and T. 31 S; then north along the range line common to R. 35 E. and R. 34 E. then east along the township line common to T. 29 S. and T. 28 S; then north along the range line common to R. 36 E. and R. 35 E; then east along the township line common to T. 28 S. and T. 27 S; then north along the range line common to R. 37 E. and R. 36 E. to the Kern-Tulare County boundary.

State of California

AIR RESOURCES BOARD

Resolution 71-80

September 15, 1971

WHEREAS, Toyo Kogyo Company, Ltd., Japan, submitted an application and all required test data for approval of its emission control systems for the 1972-model vehicles;

WHEREAS, the applicant's exhaust emission control systems are described as follows;

1. Engine-modification system with major elements:
  - (1) carburetor with specified flow rates,
  - (2) distributor with specified advance characteristics,
  - (3) deceleration valve.
2. Air-injection type exhaust emission control system for its reciprocating engines with major elements:
  - (1) rotary-vane air pump,
  - (2) air injection into each exhaust port,
  - (3) recommended maintenance.
3. Air-injection and thermal reactor type of exhaust control system for its Wankel engines with major elements:
  - (1) rotary-vane air pump,
  - (2) air injection into each exhaust port,
  - (3) thermal reactor,
  - (4) recommended maintenance, and

WHEREAS, the Board finds that the systems comply with the California Administrative Code, Title 13, Chapter 3, Sub-Chapter 1 and Sub-Chapter 2, Article 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Issue a certificate of approval to Toyo Kogyo Company, Ltd., Japan, with respect to the 1972-model vehicles, 6,000 pounds or less gross vehicle weight, as listed below:

State of California

AIR RESOURCES BOARD

1972 Emission Control Systems Approval

Toyo Kogyo Company, Ltd.

Staff Report

September 15, 1971

Toyo Kogyo Company, Ltd., has submitted a complete application for 1972-model year approval of its exhaust emission control systems for its Mazda vehicles. The applicant elected to qualify these vehicles for meeting the 1972 exhaust emission standard by the optional test procedure.

The applicant's emission control systems are air injection, thermal reactor or engine-modification types of exhaust emission control systems.

Projected Emissions of Each Test Vehicle

Engine Family Identification	Engine Size Cubic Inches	Vehicle Number	Control System*	Projected Exhaust Emissions at 50 Miles		
				HC-gms/mi	CO-gms/mi	NO <sub>2</sub> -gms/mi
Toyo 1	71.4	1	EM-CT	2.8**	27 **	1.8*
	71.4	2	EM-CT	2.3	21	2.1
Toyo 2	96.8	6	EM-CT	2.3**	24**	2.3*
	96.8	7	EM-CT	2.7	24	2.6
Toyo 3	30 x 2	9	AI-TR-CT	2.2**	23**	1.1*
	Rotary	10	AI-TR-CT	2.7	19	1.5
Toyo 4	35 x 2	12	AI-TR-CT	2.5**	25**	1.3*
	Rotary	13	AI-TR-CT	2.7	18	1.6
Toyo 5	109.6	1	AI-CT	1.2**	25**	2.1*
	109.6	4	AI-CT	1.2	27	1.8

\* Independent Laboratory (Holly Carburetor)

\*\* EPA Data

EM- Engine Modification

AI- Air Injection

CT- Condenser tank plus chemical can.

TR- Thermal Reactor

Each test vehicle met the 1972-model emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide, 3.2 grams per mile oxides of nitrogen.

Based on the test data and other information submitted by the applicant, the staff finds that the Toyo Kogyo exhaust emission control systems for vehicles less than 6,001 pounds gross vehicle weight meet California requirements for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-80.

ed  
State of California

AIR RESOURCES BOARD

Resolution 71-80 A

February 16, 1972

WHEREAS, Toyo Kogyo Company, Ltd., Japan, submitted an application and all required test data for approval of its emission control system for an additional 1972-model vehicle;

WHEREAS, the applicant's exhaust emission control system is described as follows:

Engine-modification type with major elements:

- (1) carburetor with specified flow rates,
- (2) distributor with specified advance characteristics,
- (3) deceleration valve; and

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Sub-Chapter 1 and Sub-Chapter 2, Article 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Issue a certificate of approval to Toyo Kogyo Company, Ltd., Japan, with respect to the 1972-model vehicle, 6,000 pounds or less gross vehicle weight, as listed below:

Engine Family - Toyo 2

Engine Size - 96.8 cubic inches

Vehicle Model - Mazda B1600

State of California  
AIR RESOURCES BOARD  
1972 Emission Control Systems Approval

Toyo Kogyo Company, Ltd.

Staff Report

February 16, 1972

Toyo Kogyo Company, Ltd., has submitted a complete additional application for 1972-model year approval of the exhaust emission control system for its Mazda B1600 vehicle. The applicant elected to qualify these vehicles for meeting the 1972 exhaust emission standard by the optional test procedure.

The applicant's emission control system is of the engine modification type.

Projected Emissions of Test Vehicle

<u>Engine Family</u> <u>Identification</u>	<u>Engine Size</u> <u>Cubic Inches</u>	<u>Vehicle</u> <u>Number</u>	<u>Projected Exhaust Emissions</u> <u>at 50,000 Miles</u>		
			<u>HC-gms/mi</u>	<u>CO-gms/mi</u>	<u>NO<sub>2</sub>-gms/mi</u>
Toyo 2	96.8	BNA61-16754	2.9**	32**	1.6*

\* Independent Laboratory (Holley Carburetor)

\*\* EPA Data

The test vehicle met the 1972-model emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide, and 3.2 grams per mile oxides of nitrogen.

Based on the test data and other information submitted by the applicant, the staff finds that the Toyo Kogyo exhaust emission control system for this engine family for vehicles less than 6,001 pounds gross vehicle weight meets California requirements for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-80 A.



State of California

AIR RESOURCES BOARD

Resolution 71-81

September 15, 1971

Chrysler United Kingdom, Ltd., submitted an application and all required test data for approval of its emission control system for its 1972-model light-duty vehicles;

WHEREAS, the applicant's exhaust control system is described as an engine-modification type with major elements for the 91 CID engine family vehicles:

- (1) carburetor with specified flow rates and with variable venturi diameter,
- (2) vacuum control valve,
- (3) vacuum retarding distributor with specified advance characteristics,
- (4) recommended maintenance; and

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Sub-Chapter 2, Articles 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Issue a resolution of approval to Chrysler United Kingdom, Ltd., with respect to its 1972-model vehicles, 6,000 pounds or less gross vehicle weight, of the engine family listed below:

<u>Engine Family</u>	<u>Control System</u>	<u>Engine Size Cubic Inches</u>	<u>Vehicle Model</u>
91 CID	EM	91.41	Plymouth Cricket

State of California

AIR RESOURCES BOARD

Staff Report

1972 Emission Control Systems Approval

Chrysler United Kingdom, Ltd.

September 15, 1971

Chrysler (U.K.) Ltd., has submitted a complete application for 1972-model year approval of its exhaust emission control system for its light-duty vehicles. The applicant elected to qualify these vehicles for meeting the 1972 exhaust emission standards by the optional test procedure.

The applicant's exhaust emission control system is of the engine modification type.

Projected Emissions of Each Test Vehicle

Engine Family Identification	Engine Size Cubic Inches	Vehicle Number	Control System	Projected Exhaust Emissions at 50,000 Miles		
				HC-gms/mi.	CO-gms/mi	NO <sub>2</sub> -gms/mi.
91 CID	91.41	BE1	EM	2.34	26.3	2.83
91 CID	91.41	BE2	EM	1.55*	11.7*	1.91**

EM - Engine Modification

\* - Environmental Protection Agency Laboratory Data

\*\* - Ethyl Corporation Laboratory Data

Each test vehicle met the 1972-model year emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide, and 3.2 grams per mile oxides of nitrogen.

Based on the test data and other information submitted by the applicant, the staff finds that the Chrysler (U.K.) Cricket exhaust emission control system meets California requirements for vehicles under 6,000 pounds gross vehicle weight for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-81.

State of California

AIR RESOURCES BOARD

Resolution 71-82

September 15, 1971

WHEREAS, research proposals have been submitted to the Air Resources Board under the provisions of SB 848 (1970 Stats. Ch. 1599) in response to the Board's request for proposals entitled "Uncontrolled Vehicle Emission Study" (RFP-V), issued on July 10, 1971;

WHEREAS, the Research Proposal Screening Committee has evaluated these proposals as required under SB 848; and

WHEREAS, the Screening Committee has recommended for funding the proposal:

ARB Proposal Number 1A-253-7, submitted by Automotive Environmental Systems, Inc., in the amount of \$113,280;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board under the powers and authority granted in SB 848 (1970 Stats. Ch. 1599) hereby accepts the recommendations of the Research Proposal Screening Committee and approves the proposal submitted under SB 848 subject to a staff investigation and approval of the A.E.S.I. facilities:

ARB Proposal Number 1A-253-7, submitted by Automotive Environmental Systems, Inc., in the amount of \$113,280,

and authorizes the Executive Officer to initiate administrative procedures and to execute all necessary documents and contracts for the research effort proposed in an amount not to exceed \$113,280.

State of California

AIR RESOURCES BOARD

Resolution 71-83

September 15, 1971

WHEREAS, research proposals have been submitted to the Air Resources Board under the provisions of SB 848 (1970 Stats. Ch. 1599) in response to the Board's request for proposals entitled "Aerosol Characterization Study" (RFP-V), issued on July 10, 1971;

WHEREAS, the Research Proposal Screening Committee has evaluated these proposals as required under SB 848; and

WHEREAS, the Screening Committee has recommended for funding the proposal:

ARB Proposal Number 4E-188-7, submitted by North American Rockwell, in the amount of \$1,697,384;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board under the powers and authority granted in SB 848 (1970 Stats. Ch. 1599) hereby accepts the recommendations of the Research Proposal Screening Committee and approves the proposal submitted under SB 848:

ARB Proposal Number 4E-188-7, submitted by North American Rockwell, in the amount of \$1,697,384,

and authorizes the Executive Officer to initiate administrative procedures and to execute all necessary documents and contracts for the research effort proposed in an amount not to exceed \$1,697,384.

State of California

AIR RESOURCES BOARD

Resolution 71-84

September 15, 1971

WHEREAS, Toyota Motor Company, Ltd., submitted an application and all required test data for approval of its emission control systems for its 1972-model light-duty vehicles;

WHEREAS, the applicant's exhaust control systems are described as follows:

- A. An air-injection exhaust emission control system (including NO<sub>x</sub> control) with major elements for the Toyota "2M" and "4M" engine family vehicles:
  - (1) air pump with air injection into the exhaust manifold,
  - (2) spark control computer with thermal and speed sensors,
  - (3) carburetor with auxiliary "slow valve" and throttle positioner,
  - (4) vacuum switching valve,
  - (5) distributor with specified advance characteristics,
  - (6) recommended maintenance.
- B. An engine-modification type of exhaust emission control system (including NO<sub>x</sub> control) with major elements for the Toyota "2T-C," "18R-C," and "F" engine family vehicles:
  - (1) vacuum switching valve,
  - (2) modified carburetor with throttle positioner,
  - (3) spark control computer with thermal and speed sensors
  - (4) mixture control valve,
  - (5) distributor with specified advance characteristics,
  - (6) recommended maintenance; and

WHEREAS, the Board finds that the systems comply with the California Administrative Code, Title 13, Chapter 3, Sub-Chapter 2, Article 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

State of California  
AIR RESOURCES BOARD  
Staff Report  
1972 Emission Control Systems Approval  
Toyota Motor Company, Ltd.  
September 15, 1971

Toyota Motor Company, Ltd., has submitted a complete application for 1972-model year approval of its exhaust emission control systems for its light-duty vehicles. The applicant elected to qualify these vehicles for meeting the 1972 exhaust emission standards by the optional test procedure.

The applicant's exhaust emission control systems are a combination of engine modification type and air injection.

Projected Emissions of Each Test Vehicle

Engine Family Identification	Engine Size Cubic Inches	Vehicle Number	Control System	Projected Exhaust Emissions at 50,000 Miles		
				HC-gms/mi.	CO-gms/mi.	NO <sub>2</sub> -gms/mi.
2T-C	96.9	TE21-000017	EM	2.4*	19*	2.1**
2T-C	96.9	TE21-000014	EM	2.3	17	2.7
18R-C	120	RT83-031162	EM	1.9*	27*	2.4**
18R-C	120	RT78-107069	EM	2.4	21	2.7
2M	137.4	RT78-118693	AI	2.5*	24*	2.1**
2M	137.4	RT62-130859	AI	2.5	22	2.7
4M	156.4	MS65-000023	AI	2.3*	20*	2.7**
4M	156.4	MS65-000019	AI	2.3	28	2.7
F	236.7	FJ55-18491	EM	2.2*	28*	2.4**
F	236.7	FJ40-91108	EM	2.6	35	2.5

EM - Engine Modification

AI - Air Injection

\* - Environmental Protection Agency Data

\*\* - Horiba, Ltd., Data

Each test vehicle met the 1972-model year emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide, and 3.2 grams per mile oxides of nitrogen.

Toyota also states in its application that the engine and transmission combination of the vehicles for which approval is requested have been designed to operate with 91 Research Octane Number fuel and that no adverse driveability effect will result from the use of such fuel.

Based on the test data and other information submitted by the applicant, the staff finds that Toyota Motor Company exhaust emission control systems meet California requirements for vehicles under 6,000 pounds gross vehicle weight for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-84.

State of California  
AIR RESOURCES BOARD

Resolution 71-84A

November 17, 1971

WHEREAS, Toyota Motor Company, Ltd., submitted an additional application and all required test data for approval of the emission control system for its 1972-Model year Corolla - 1 vehicles;

WHEREAS, the applicant's exhaust control system is described as follows:

An engine-modification type of exhaust emission control system (including NOx control) with major elements:

- (1) vacuum switching valve,
- (2) modified carburetor with throttle positioner,
- (3) spark control computer with thermal and speed sensors,
- (4) mixture control valve,
- (5) distributor with specified advance characteristics,
- (6) recommended maintenance; and

WHEREAS, the Board finds that the systems comply with the California Administrative Code, Title 13, Chapter 3, Sub-Chapter 2, Article 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Issue a resolution of approval to Toyota Motor Company, Ltd., with respect to its 1972-model vehicles, 6,000 pounds or less gross vehicle weight, of the engine families listed below:

Engine Family  
Identification

3K-C

Engine Size  
Cubic Inches

71.2

Vehicle Models

Corolla-1: 2-Door Sedan  
4-Door Sedan  
Coupe

State of California

AIR RESOURCES BOARD

Staff Report

1972 Emission Control Systems Approval

Toyota Motor Company, Ltd.

November 17, 1971

Toyota Motor Company, Ltd., has submitted an additional application for 1972-model year approval of the exhaust emission control system for its Corolla-1 vehicles. The applicant elected to qualify these vehicles for meeting the 1972 exhaust emission standards by the optional test procedure.

The applicant's exhaust emission control system is of the engine modification type.

Projected Emissions of Each Test Vehicle

<u>Engine Family Identification</u>	<u>Engine Size Cubic Inches</u>	<u>Vehicle Number</u>	<u>Projected Exhaust Emissions at 50,000 Miles</u>		
			<u>HC-gms/mi</u>	<u>CO-gms/mi</u>	<u>NO<sub>2</sub>-gms/mi</u>
3K-C	71.2	KE20-165718	2.6*	22.0*	1.6**
3K-C	71.2	KE20-165782	2.4	19.0	2.1

\* - Environmental Protection Agency Data

\*\* - Horiba, Ltd., Data

Each test vehicle met the 1972-model year emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide, and 3.2 grams per mile oxides of nitrogen.

Based on the test data and other information submitted by the applicant, the staff finds that Toyota Motor Company exhaust emission control system meets California requirements for vehicles under 6,000 pounds gross vehicle weight for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-84-A.



State of California

AIR RESOURCES BOARD

Resolution 71-85

September 15, 1971

WHEREAS, Renault, Inc. submitted an application and all required test data for approval of its exhaust emission control system for its 1972-model vehicles;

WHEREAS, the applicant's exhaust control system is described as follows:

An engine-modification type exhaust emission control system with major elements:

- (1) carburetor with specified flow rates,
- (2) distributor with specified centrifugal and vacuum advance characteristics,
- (3) transmission controlled idle speed,
- (4) transmission regulated spark system (for manual transmission vehicles),
- (5) recommended maintenance; and

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Article 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Issue a resolution of approval to Renault, Inc. with respect to its 1972-model vehicles, 6,000 pounds or less gross vehicle weight, as listed below:

<u>Engine Family Identification</u>	<u>Engine Size Cubic Inches</u>	<u>Vehicle Models</u>
821/841	95.5	Renault 12, 15, 16 (Manual)
821/841	100.5	Renault 12, 15, 16 (Automatic)

State of California

AIR RESOURCES BOARD

Staff Report

1972 Emission Control Systems Approval

Renault, Inc.

September 15, 1971

Renault, Inc. has submitted a complete application for 1972-model year approval of its exhaust emission control system for its vehicles for the 821/841 engine family. The applicant tested these vehicles and met the 1972 exhaust emission standards using the optional test procedure.

The applicant's exhaust emission control system is of the engine-modification type.

Projected Emissions of Each Test Vehicle

Engine Family Identification	Engine Size Cubic Inches	Vehicle Number	Projected Exhaust Emissions at 50,000 Miles		
			HC-gms/mile	CO-gms/mile	NO <sub>2</sub> -gms/mile
821/841	95.5	9717564	3.14*	27.3*	2.92**
821/841	100.5	8686358	2.42*	29.9*	2.85**

\*Environmental Protection Agency Laboratory Data

\*\*Union Technique Del'Automobile Du'Motocycle, Et DuCycle  
(U.T.A.C.) Laboratory Data

Each test vehicle met the 1972-model year emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide and 3.2 grams per mile oxides of nitrogen.

Based on the test data and other information submitted by the applicant, the staff finds that Renault, Inc. exhaust emission control system meets California requirements for vehicles under 6,000 pounds gross vehicle weight for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-85.

State of California

AIR RESOURCES BOARD

Resolution 71-85-A

May 17, 1972

WHEREAS, Renault, Inc. submitted an application and all required test data for approval of its exhaust emission control system for an additional 1972-model vehicle;

WHEREAS, the applicant's exhaust control system is described as follows:

A fuel injection type exhaust emission control system with major elements:

- (1) electronically controlled fuel injection system,
- (2) distributor with specified centrifugal and vacuum advance characteristics,
- (3) transmission controlled spark advance,
- (4) recommended maintenance; and

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Article 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Issue a resolution of approval to Renault, Inc. with respect to its 1972-model vehicles, 6,000 pounds or less gross vehicle weight, as listed below:

<u>Engine Family Identification</u>	<u>Engine Size Cubic Inches</u>	<u>Vehicle Model</u>
807	95.5	Renault 17 TS (Manual)

State of California

AIR RESOURCES BOARD

Resolution 71-86

September 15, 1971

WHEREAS, research proposals have been submitted to the Air Resources Board under the provisions of SB 848 (1970 Stats. Ch. 1599) in response to the Board's request for proposals entitled "Aerosol Characterization Study" and the "Three Dimensional Mapping of Aerosol Concentrations" (RFP-V), issued on July 10, 1971;

WHEREAS, the Research Proposal Screening Committee has evaluated these proposals as required under SB 848; and

WHEREAS, the Screening Committee has recommended funding pending integration into a consolidated project of the following proposals with the approved Proposal Number 4E-188-7:

ARB Proposal Number 4E-259-7, submitted by Department of Navy, in the amount of \$185,000;

ARB Proposal Number 4F-230-7, submitted by Meteorology Research Inc., in the amount of \$227,163;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board under the powers and authority granted in SB 848 (1970 Stats. Ch. 1599) hereby accepts the recommendations of the Research Proposal Screening Committee and approves the two proposals submitted under SB 848:

ARB Proposal Number 4E-259-7, submitted by Department of Navy, in the amount of \$185,000;

ARB Proposal Number 4F-230-7, submitted by Meteorology Research Inc., in the amount of \$227,163;

and authorizes the Executive Officer to initiate administrative procedures and to execute all necessary documents and contracts for the research effort proposed in an amount to be determined but not to exceed a total of \$400,000.

State of California

AIR RESOURCES BOARD

Resolution 71-86A

October 20, 1971

WHEREAS, the Meteorological Research, Incorporated and Department of Navy integrated their proposals into a coordinated consolidated proposal as specified in Resolution 71-86 approved by the Air Resources Board;

WHEREAS, the Research Proposal Screening Committee has recommended the funding of the consolidated proposal:

ARB Proposal Number 4F-230-7A submitted by Meteorological Research Incorporated in cooperation with US Navy Weapons Center, in the amount of \$460,779;

NOW, THEREFORE, BE IT RESOLVED that the Air Resources Board under the powers and authority granted in SB 848 (1970 Stats. Ch. 1599) hereby amends Resolution 71-86 and authorizes the Executive Officer to initiate administrative procedures and to execute all necessary documents and contracts for the research effort proposed in an amount to be determined but not to exceed a total of \$460,000.

State of California

AIR RESOURCES BOARD

Resolution 71-87

Oildex Corporation

October 20, 1971

WHEREAS, the Oildex Corporation of Tulsa, Oklahoma is no longer the owner of the Oildex Closed Crankcase Emission Control System as stated in Resolution 63-16 and 63-25;

WHEREAS, the Oildex Corporation was sold to the R. M. Hollingshead Corporation of Camden, New Jersey, who in turn sold it to Mr. Everett H. York, the West Coast distributor of the Oildex crankcase emission control device;

WHEREAS, Mr. York has submitted documents to satisfy Section (G), Criteria (g) of the California Test Procedure and Criteria for Motor Vehicle Crankcase Emission Control Systems; and

WHEREAS, there has been no mechanical or physical change in the system which is described as follows:

- (1) A spring-loaded regulating valve assembly, actuated by engine manifold vacuum and incorporating a residue collecting jar and cotton filtering element, between the crankcase and intake manifold,
- (2) A rubber tube from the oil filler cap or oil filler spout and terminating in a wire mesh flame arrestor within the clean side of the air cleaner,
- (3) Sealed oil filler cap;

NOW, THEREFORE, BE IT RESOLVED, That this Board rescind Resolutions 63-16 and 63-25 and issue a Resolution of Accreditation to the Oildex Corporation of Long Beach, California, Closed Crankcase Emission Control System for used motor vehicles in classifications (b) through (f) as designated by Title 13, California Administrative Code, Chapter 3, Subchapter 1, Article 1, Section 2004.

State of California

AIR RESOURCES BOARD

Resolution 71-88

October 20, 1971

WHEREAS, Pollution Controls Industries, Inc., 2207 Border Avenue, Torrance, California 90501, has applied for eight (8) permits to test an experimental exhaust emission control system on a motor vehicle;

WHEREAS, it is intended that the system would provide control of hydrocarbons, carbon monoxide, and nitrogen oxides on both new and used vehicles; and

WHEREAS, the system operates as a control method for the introduction of fuel and air into the intake manifold;

NOW, THEREFORE, BE IT RESOLVED, That Pollution Controls Industries, Inc., is hereby granted eight (8) permits for the testing of an experimental emission control device on 8 motor vehicles for a period of one year from the above date.

State of California

AIR RESOURCES BOARD

Resolution 71-89

October 20, 1971

WHEREAS, Peugeot, Inc. has submitted an application and all test data for approval of its emission control system for the 1972-model vehicles;

WHEREAS, the applicant's emission control system is described as an engine-modification type exhaust emission control system called "Coppolair" with major elements:

A. Family 304 XLE:

- (1) carburetor with specified flow rates,
- (2) distributor with specified advance characteristics,
- (3) retarded spark at deceleration,
- (4) temperature-controlled air intake heater,
- (5) two idle speeds, electronically-controlled and governed by operating conditions,
- (6) recommended maintenance.

B. Family 504 XN1:

- (1) compound carburetors with specified flow rates, second carburetor effective only at part throttle operation,
- (2) distributor with specified advance characteristics,
- (3) temperature-controlled air intake heater,
- (4) two idle speeds, electronically-controlled and governed by operating conditions,
- (5) recommended maintenance; and

WHEREAS, the Board finds that the systems comply with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Articles 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080 of the Health and Safety Code,

Issue a resolution of approval to Peugeot, Inc., with respect to the 1972-model vehicles, 6,000 pounds or less gross vehicle weight, as listed below:

<u>Engine Family Identification</u>	<u>Engine Size Cubic Inches</u>	<u>Vehicle Model</u>
304 XLE	78.6	Sedan 2200 Station Wagon 1400
504 XN1	120.3	Sedan 6000 Station Wagon 2400



# SUPPLEMENTAL INFORMATION

1972-Model Year

MANUFACTURER PEUGEOT

Resolution No. 71-89

MODEL	EMISSION CONTROL	C.I.D. ENGINE SIZE	ENGINE FAMILY	INERTIA WEIGHT	TUNE-UP SPECIFICATIONS			PART NOS.	
					ENGINE RPM	IDLE MIXTURE	IGNITION TIMING	CARBURETOR	DISTRIBUTOR
Sedan 2200	Coppolair and Charcoal Canister	78.6	304 XL3	2,500	800	1.5% CO	5° BTDC	Solex 34	Ducellier
Station Wagon 1400		78.6	304 XL3	2,500	800		5° BTDC	Solex 34	Ducellier
Sedan 6000	As above	120.3	504 XNL	3,000	800	1.5% CO	5° BTDC	Solex 32	Ducellier
Station Wagon 2400	As above	120.3	504 XNL	3,000	800	1.5% CO	5° BTDC	Solex 32	Ducellier

State of California

AIR RESOURCES BOARD

1972 Emission Control System Approval

Peugeot, Incorporated

Staff Report

October 20, 1971

Peugeot, Inc., has submitted a complete application for 1972-model year approval of its exhaust emission control system for its Peugeot vehicles. The applicant elected to qualify these vehicles for meeting the 1972 exhaust emission standard by the optional test procedure.

The applicant's emission control system is an engine-modification type of exhaust emission control system known as "Coppolair."

Projected Emissions of Each Test Vehicle

Engine Family Identification	Engine Size Cubic Inches	Vehicle Number	Projected Exhaust Emissions at 50,000 Miles		
			HC-gms/ml	CO-gms/ml	NO <sub>2</sub> -gms/ml
304 XLE	78.6	321	2.4**	23**	2.9*
		334	2.6	26	1.6
504 XN1	120.3	263	1.2**	14**	1.9*
		272	2.7	30	2.7
		279	2.5	26	2.5

\* Independent Laboratory

\*\*EPA Data

Each test vehicle met the 1972-model emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide, 3.2 grams per mile oxides of nitrogen.

Based on the test data and other information submitted by the applicant, the staff finds that the Peugeot exhaust emission control systems for vehicles less than 6,001 pounds gross vehicle weight meet California requirements for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-89.

State of California

AIR RESOURCES BOARD

Resolution 71-90

October 20, 1971

WHEREAS, James Turner & Associates, Dallas, Texas, has submitted an application for a Board finding that its "Ionizer" device be exempt from the prohibitions of Section 27156 of the California Vehicle Code;

WHEREAS, the prohibitions of Section 27156 do not apply to an alteration, modification, or modifying device, apparatus, or mechanism found by resolution of the Air Resources Board either to not reduce the effectiveness of any required motor vehicle pollution control device or to result in increased emissions from such modified or altered vehicle; and

WHEREAS, the Board's staff has made an engineering evaluation of the "Ionizer" device and has concluded that the device will not reduce the effectiveness of required emission control devices,

NOW, THEREFORE, BE IT RESOLVED, That this Board find that the "Ionizer" device does not reduce the effectiveness of any required motor vehicle pollution control device and is therefore exempt from the prohibitions of Section 27156 of the Vehicle Code;

IT IS FURTHER RESOLVED, That the Executive Officer is instructed to advise James Turner & Associates that:

- (1) THIS RESOLUTION HAS BEEN ADOPTED AND THAT THE RESOLUTION DOES NOT CONSTITUTE A CERTIFICATION, ACCREDITATION, APPROVAL, OR ANY OTHER TYPE OF ENDORSEMENT BY THE AIR RESOURCES BOARD OF ANY CLAIMS OF THE APPLICANT CONCERNING ANTI-POLLUTION BENEFITS OR ANY ALLEGED BENEFITS OF THE "IONIZER" DEVICE:
- (2) No claim of any kind, such as "Approved by Air Resources Board" may be made with respect to the action taken herein in any advertising or other oral or written communication:
- (3) Section 17500 of the Business and Professions Code makes unlawful untrue or misleading advertising and Section 17534 makes violation punishable as a misdemeanor;
- (4) Sections 39130 and 39184 of the Health and Safety Code provide as follows:
  39130. No person shall sell, display, advertise, or represent as a certified device any device which, in fact, is not a certified device. No person shall install or sell for installation upon any motor vehicle, any motor vehicle pollution control device which has not been certified by the board.
  39184. No person shall sell, display, advertise, or represent as an accredited device any device which, in fact, is not an accredited device. No person shall install or sell for installation upon any

AIR RESOURCES BOARD

Staff Report

James Turner and Associates, Inc.

Evaluation of the "Ionizer" Device

October 20, 1971

I. Introduction

This report is a summary of the staff's evaluation of the "Ionizer" device. The basis for this report is the "Air Resources Board Criteria for Determining Compliance with Section 27156 of the Vehicle Code," adopted February 17, 1971. This report is only concerned with the effect on exhaust emission levels due to the installation of the device; no consideration was given to its effect on performance and driveability of the vehicle. In no way does the report imply an endorsement by the staff of any beneficial effects of the "Ionizer" device.

II. Purpose and Claims

The applicant claims that the device will "increase combustion efficiency, make the engine run smoother and hopefully emit less undesirable elements."

III. System Description

The device consists of a set of plastic blocks designed to be snapped on to the ignition wires above the distributor. Each block is interconnected by an insulated wire. The applicant claims that "these blocks tap the (static) electro-magnetic energy and inject it into the combustion chambers of the non-firing cylinders simultaneously, breaking down the hydrocarbon molecules and generally creating conditions for more efficient combustion."

IV. Evaluation

This device is similar to another device called "Paser Magnum." The applicant claims to have been the original developer of the "Paser Magnum" and that the "Ionizer" will have the same effects on engine performance. The "Paser Magnum" was tested at the Air Resources Board Laboratory and showed no significant effects on exhaust emissions. After making an engineering evaluation of both devices, the staff concluded that they were similar in effect and no further testing was required.

V. Conclusion and Recommendations

The staff has found no evidence that the "Ionizer" device will reduce the effectiveness of required existing motor vehicle emission control devices.

The staff, therefore, recommends that the Board find that the "Ionizer" device be exempt from the prohibitions of Section 27156 of the Vehicle Code.

Ref: Resolution 71-90

STATE OF CALIFORNIA  
AIR RESOURCES BOARD

RESOLUTION 71-92

October 20, 1971

WHEREAS, on March 17, 1971 the Board adopted, pursuant to Section 39298.2 of the Health and Safety Code, Agricultural Burning Guidelines for the regulation and control of agricultural burning in Subchapter 2, Chapter 1, Part III, Title 17, California Administrative Code; and

WHEREAS, Section 39298.8 of the Health and Safety Code requires Air Pollution Control Districts to adopt an implementation plan consistent with these guidelines for regulation and control of agricultural burning; and

WHEREAS, Section 39298.9 of the Health and Safety Code requires the Air Pollution Control Districts to submit the adopted Agricultural Burning Implementation Plans to the Board by September 27, 1971 and requires the Board to approve, modify or reject the plan; and

WHEREAS, The Air Pollution Control Districts of Butte, Colusa, El Dorado, Glenn, Kern, Mariposa, Monterey-Santa Cruz, Nevada, Placer, Plumas, Sacramento, San Benito, San Luis Obispo, Shasta, Sierra, Stanislaus, Sutter, Tehama, Ventura, Yolo-Solano and Yuba have submitted agricultural burning implementation plans consistent with the Board's Agricultural Burning Guidelines;

NOW, THEREFORE, BE IT RESOLVED, That the agricultural burning implementation plans of the following air pollution control districts are approved as submitted:

- |                        |                     |                 |
|------------------------|---------------------|-----------------|
| 1. Butte               | 8. Nevada           | 15. Sierra      |
| 2. Colusa              | 9. Placer           | 16. Stanislaus  |
| 3. El Dorado           | 10. Plumas          | 17. Sutter      |
| 4. Glenn               | 11. Sacramento      | 18. Tehama      |
| 5. Kern                | 12. San Benito      | 19. Ventura     |
| 6. Mariposa            | 13. San Luis Obispo | 20. Yolo-Solano |
| 7. Monterey-Santa Cruz | 14. Shasta          | 21. Yuba        |

BE IT FURTHER RESOLVED, That the agencies named in these plans are designated permit issuing agencies pursuant to Section 39298.1 of the Health and Safety Code.

STATE OF CALIFORNIA

AIR RESOURCES BOARD

RESOLUTION 71-92A

November 17, 1971

WHEREAS, On March 17, 1971 the Board adopted, pursuant to Section 39298.2 of the Health and Safety Code, Agricultural Burning Guidelines for the regulation and control of agricultural burning in Subchapter 2, Chapter 1, Part III, Title 17, California Administrative Code; and

WHEREAS, Section 39298.8 of the Health and Safety Code requires Air Pollution Control Districts to adopt an implementation plan consistent with these guidelines for regulation and control of agricultural burning; and

WHEREAS, Section 39298.9 of the Health and Safety Code requires the Air Pollution Control Districts to submit the adopted Agricultural Burning Implementation Plans to the Board and requires the Board to approve, modify or reject the plan; and

WHEREAS, The Air Pollution Control Districts of Calaveras, Fresno, Madera, Merced, San Joaquin, and Tulare, have submitted agricultural burning implementation plans consistent with the Board's Agricultural Burning Guidelines;

NOW, THEREFORE, BE IT RESOLVED, That the agricultural burning implementation plans of the following air pollution control districts are approved as submitted:

Calaveras	Madera	San Joaquin
Fresno	Merced	Tulare

BE IT FURTHER RESOLVED, That the fire protection agencies named in these plans are designated permit issuing agencies pursuant to Section 39298.1 of the Health and Safety Code.

STATE OF CALIFORNIA

AIR RESOURCES BOARD

RESOLUTION 71-92B

December 15, 1971

WHEREAS, On March 17, 1971 the Board adopted, pursuant to Section 39298.2 of the Health and Safety Code, Agricultural Burning Guidelines for the regulation and control of agricultural burning in Subchapter 2, Chapter 1, Part III, Title 17, California Administrative Code; and

WHEREAS, Section 39298.8 of the Health and Safety Code requires Air Pollution Control Districts to adopt an implementation plan consistent with these guidelines for regulation and control of agricultural burning; and

WHEREAS, Section 39298.9 of the Health and Safety Code requires the Air Pollution Control Districts to submit the adopted Agricultural Burning Implementation Plans to the Board and requires the Board to approve, modify or reject the plan; and

WHEREAS, The Air Pollution Control Districts of Kings and Tuolumne, have submitted agricultural burning implementation plans consistent with the Board's Agricultural Burning Guidelines;

NOW, THEREFORE, BE IT RESOLVED, That the agricultural burning implementation plans of the Kings and Tuolumne Air Pollution Control Districts are approved as submitted;

BE IT FURTHER RESOLVED, That the fire protection agencies named in these plans are designated permit issuing agencies pursuant to Section 39298.1 of the Health and Safety Code.

December 15, 1971

Delete: San Benito County Air Pollution Control District



State of California

AIR RESOURCES BOARD

RESOLUTION 71-92D

February 16, 1972

WHEREAS, on March 17, 1971 the Board adopted, pursuant to Section 39298.2 of the Health and Safety Code, Agricultural Burning Guidelines for the regulation and control of agricultural burning in Subchapter 2, Chapter 1, Part III, Title 17, California Administrative Code; and

WHEREAS, Section 39298.8 of the Health and Safety Code requires air pollution control districts to adopt an implementation plan consistent with these guidelines for regulation and control of agricultural burning; and

WHEREAS, Section 39298.9 of the Health and Safety Code requires the air pollution control districts to submit the adopted Agricultural Burning Implementation Plans to the Board and requires the Board to approve, modify or reject the plan; and

WHEREAS, The Air Pollution Control District of Los Angeles has submitted an Agricultural Burning Implementation Plan consistent with the Board's Agricultural Burning Guidelines;

NOW, THEREFORE, BE IT RESOLVED, that the Agricultural Burning Implementation Plan of the Los Angeles Air Pollution Control District is approved as submitted;

BE IT FURTHER RESOLVED, that the fire protection agencies named in this plan are designated permit issuing agencies pursuant to Section 39298.1(b) of the Health and Safety Code.

STATE OF CALIFORNIA

AIR RESOURCES BOARD

RESOLUTION 71-92E

February 16, 1972

WHEREAS, On October 22, 1971, the Air Resources Board approved the Agricultural Burning Implementation Plan of the Yolo-Solano County Air Pollution Control District and a list of burning permit issuing agencies pursuant to Sections 39298.1(b) and 39298.9 of the Health and Safety Code; and

WHEREAS, The Yolo-Solano County Air Pollution Control District has requested that the fire protection agency list be changed;

NOW, THEREFORE, BE IT RESOLVED, That pursuant to Section 39298.1(b) the list of fire protection agencies designated to issue burning permits in the Yolo-Solano County Air Pollution Control District be changed as follows:

Add

Olive Pleasant Valley Fire Department

Ryer Island Fire Department

California Medical Facility Fire Department

English Hills Fire Department

Solano County Fire Warden

California Division of Forestry

Yolo-Solano Unified Air Pollution Control District

State of California

AIR RESOURCES BOARD

RESOLUTION 71-92F

February 16, 1972

WHEREAS, on March 17, 1971 the Board adopted, pursuant to Section 39298.2 of the Health and Safety Code, Agricultural Burning Guidelines for the regulation and control of agricultural burning in Subchapter 2, Chapter 1, Part III, Title 17, California Administrative Code; and

WHEREAS, Section 39298.8 of the Health and Safety Code requires air pollution control districts to adopt an implementation plan consistent with these guidelines for regulation and control of agricultural burning; and

WHEREAS, the Riverside County Air Pollution Control District has submitted an implementation plan which defines pesticide containers as agricultural waste; and,

WHEREAS, Riverside County has requested from the Attorney General's Office an opinion on this definition; and,

WHEREAS, the Attorney General has not issued his opinion;

NOW, THEREFORE, BE IT RESOLVED, that an interim approval be granted to the Riverside Air Pollution Control District's Implementation Plan for Agricultural Burning pending the issuance of an opinion by the Attorney General; and

BE IT FURTHER RESOLVED, that the agencies listed in this plan be the agencies designated to issue permits pursuant to Section 39298.1 of the Health and Safety Code.

STATE OF CALIFORNIA

AIR RESOURCES BOARD

RESOLUTION 71-94

October 20, 1971

WHEREAS, on March 17, 1971 the Board adopted, pursuant to Section 39298.2 of the Health and Safety Code, Agricultural Burning Guidelines for the regulation and control of agricultural burning in Subchapter 2, Chapter 1, Part III, Title 17, California Administrative Code; and

WHEREAS, Section 39298.8 of the Health and Safety Code requires Air Pollution Control Districts to adopt an implementation plan consistent with these guidelines for regulation and control of agricultural burning; and

WHEREAS, Section 39298.9 of the Health and Safety Code requires the Air Pollution Control Districts to submit the adopted Agricultural Burning Implementation Plans to the Board by September 27, 1971 and requires the Board to approve, modify or reject the plan; and

WHEREAS, the Air Pollution Control Districts of Amador, Calaveras, San Joaquin, and Santa Barbara Counties have not submitted agricultural burning implementation plans to the Board for approval;

NOW, THEREFORE, BE IT RESOLVED, That the staff of the Board is directed to arrange, where necessary, for the holding of public hearings within the air basins affected to adopt suitable plans to regulate agricultural burning for the following air pollution control districts:

1. Amador
2. Calaveras
3. San Joaquin
4. Santa Barbara

State of California

AIR RESOURCES BOARD

Resolution 71-95

Marvel Schebler/Tillotson Exhaust  
Emission Control System (Forklifts)

October 20, 1971

WHEREAS, the Marvel-Schebler Division of Borg-Warner submitted an application and all test data for California certification of an exhaust emission control system for portable and mobile internal combustion engines (forklifts) used inside building;

WHEREAS, the applicant's exhaust emission control system consists of a properly designed gasoline carburetor with major elements:

1. leaner air-fuel ratio,
2. fixed jets in main metering system,
3. limited idle mixture adjustment,
4. recommended maintenance.

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Sub-Chapter 1 and Sub-Chapter 2, Article 5;

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39030, Division 26 of the Health and Safety Code,

Issue a resolution of approval to Marvel-Schebler with respect to its exhaust emission control system for new portable and mobile internal combustion engines of the following engine size:

Engine Size Class

A3

Engine Size Displacement

100-140 cubic inches

State of California

AIR RESOURCES BOARD

Staff Report

Marvel-Schebler (Forklifts)

Exhaust Emission Control System

October 20, 1971

The Marvel-Schebler Division of Borg-Warner has submitted an application containing the test data for new engines required by the California Exhaust Emission Test Procedure for Portable and Mobile Internal Combustion Engines (Forklifts) Used Inside Buildings.

The applicant's exhaust emission control system is a properly designed gasoline carburetor.

Emission Data of Each Test Engine  
Projected to 1,500 hours

<u>Engine</u>	<u>Engine Size</u> <u>Cubic Inches</u>	<u>Engine</u> <u>Class</u>	<u>Carburetor</u>	<u>CO</u> <u>Emissions</u>
Waukesha F C133			Marvel-Schebler/ Tillotson	
Engine #1	133	A3	G LE-14	0.8%
Engine #2	133	A3	G LE-14	0.8%

Each test engine in the approval fleet met the emission standard of 2.0% CO.

Based on the test data and other information submitted, the staff finds that the Marvel-Schebler/Tillotson exhaust emission control system meets the California requirements. The staff, therefore, recommends adoption of Resolution 71-95.

State of California

AIR RESOURCES BOARD

RESOLUTION 71-96

November 17, 1971

WHEREAS, Section 39296 of the Health and Safety Code prohibits use of open fires for the purpose of disposal of petroleum wastes, demolition debris, tires, tar, trees, wood waste, or other combustible or flammable solid or liquid waste; or for metal salvage or burning of automobile bodies after December 31, 1971; and

WHEREAS, Section 39297.4 of the Health and Safety Code directs the Air Resources Board to permit a city, city and county, or county to use open outdoor fires for a limited time only, in its operation of a solid waste dump, upon the finding that because of sparse population in the geographical area and economic and technical difficulties, the solid waste dump should be so operated; and

WHEREAS, there are approximately three hundred and seventy-nine city and county dumps using open burning as a means of solid waste disposal; and

WHEREAS, the Board at its May 19, 1971 meeting adopted guidelines for receiving applications from cities and counties for permission to continue open burning at dumps; and

WHEREAS, the Board at its September 15, 1971 meeting adopted guidelines for approving requests for limited time extensions to cities and counties to continue open burning at dumps;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board grants limited time extensions for the dumps listed in attached Tables 1 through 9 for the time extensions recommended.

TABLE 1  
 RECOMMENDED TIME EXTENSIONS FOR  
 OPEN BURNING DUMPS

Great Basin Valley

Name of Site	Jurisdiction	Population Density (People per square mile)	Approval Criteria	People Served	Amount Burned (Tons per day)	Time Extension Requested	Time Extension Recommended
MONO COUNTY							
Crowley Lake	County	4	b	1000	3	2 years	2 years
June Lake	County	4	b	2000	4	2 years	2 years
Bridgeport	County	4	b	750	2	2 years	2 years

\* Population Density is based on 5 mile radius for criterias a and c, and 20 mile radius for criteria b.



TABLE 2  
RECOMMENDED TIME EXTENSIONS FOR  
OPEN BURNING DUMPS  
North Central Coast

Name of Site	Jurisdiction	Population Density * (people per square mile)	Approval Criteria	People Served	Amount Burned (tons per day)	Time Extension Requested	Time Extension Recommended
MONTEREY COUNTY							
Bradley	County	2	b	300	1	Not specified	2 years
Lockwood	County	2	b	570	1	Not specified	2 years
Parkfield	County	2	b	200	1	Not specified	2 years
San Ardo	County	2	b	800	6	Not specified	2 years

\* Population Density is based on 5 mile radius for criterias a and c, and 20 mile radius for criteria b.

TABLE 3  
RECOMMENDED TIME EXTENSIONS FOR  
OPEN BURNING DUMPS  
North Coast

Name of Site	Jurisdiction	Population Density* (People per square mile)	Approval Criteria	People Served	Amount Burned (Tons per day)	Time Extension Requested	Time Extension Recommended
<b>DEL NORTE COUNTY</b>							
Gasquet	County	6	a	437	1	1 year	1 year
Klamath	County	18	a	1458	5	1 year	1 year
Ft. Dick	County	37	a	2916	1	1 year	1 year
Crescent City	County	33	a	9622	20	1 year	1 year
<b>SONOMA COUNTY</b>							
Occidental	County	69	a	5407	20	6 months	6 months
<b>HUMBOLDT COUNTY</b>							
Orick	County	5	a	1500	2	2 years	1 year
Orleans	County	2	b	600	1	2 years	2 year
Hoopla	County	10	a	3000	3	2 years	1 year
Redwood Valley	County	1	b	50	1	2 years	2 year
Willow Creek	County	4	a	1200	1	2 years	1 year
Carlotta	County	4	b	1300	1	2 years	2 year
Shively	County	1	b	250	1	2 years	2 year
<b>LAKE COUNTY</b>							
Kelseyville	County	2	b	1840	4	6 months	6 months
Middletown	County	18	a	1386	2	6 months	6 months
Nice	County	41	a	3170	7	6 months	6 months
Cobb	County	11	a	851	2	6 months	6 months
Lakeport	County	103	c	3000	6	6 months	6 months
Clear Lake Highlands	County	73	a	8700	18	6 months	6 months
<b>MENDOCINO COUNTY</b>							
Laytonville	County	17.1	a	1340	1	1 year	1 year
Casper	City	25.2	a	2000	5	1 year	1 year
Boonville	County	12.6	a	1000	2	1 year	1 year
Legett	County	4.5	a	300	1	1 year	1 year
Covelo	County	13.6	a	1060	3	1 year	1 year
Navarro	County	2.0	a	160	1	1 year	1 year
South Coast	County	14.4	a	1130	2	1 year	1 year
Willits	City	50.0	a	4500	10	1 year	1 year
Albion	County	12.5	a	980	2	1 year	1 year
Potter Valley	County	27.2	a	2130	1	1 year	1 year

\* Population Density is based on 5 mile radius for criterias a and c, and 20 mile radius for criteria b.

TABLE 4  
RECOMMENDED TIME EXTENSIONS FOR  
OPEN BURNING DUMPS  
Northeast Plateau Air Basin

Name of Site	Jurisdiction	Population Density* (people per square mile)	Approval Criteria	People Served	Amount Burned (tons per day)	Time Extension Requested	Time Extension Recommended
<b>LASSEN COUNTY</b>							
Bieber	County	1	b	840	1	5 years	2 years
Pittville	County	1	b	175	1	2 years	2 years
Little Valley	County	1	b	135	1	5 years	2 years
Westwood	County	1	b	1625	4	5 years	2 years
Clear Creek	County	1	b	220	1	2 years	2 years
Wendel	County	1	b	80	1	5 years	2 years
Ravendale	County	1	b	75	1	5 years	2 years
Madeline	County	1	b	85	1	5 years	2 years
Spaulding	County	1	b	50	1	2 years	2 years
Stone	County	1	b	50	1	2 years	2 years
Doyle	County	1	b	475	1	5 years	2 years
Herlong	County	1	b	1315	1	5 years	2 years
Sunnyside	County	1	b	1225	3	5 years	2 years
Johnstonville	County	1	b	775	1	5 years	2 years
Litchfield	County	1	b	500	1	5 years	2 years
Susanville	City	< 100	a	8000	12	1 year	1 year
<b>MODOC COUNTY</b>							
Adin	County	1	b	380	1	2 years	2 years
Canby	County	1	b	168	1	2 years	2 years
Cedarville	County	1	b	592	1	2 years	2 years
Devis Creek	County	2	b	104	1	2 years	2 years
Day	County	1	b	50	1	2 years	2 years
Eagleville	County	1	b	158	1	2 years	2 years
Fort Bidwell	County	4	b	166	1	2 years	2 years
Lake City	County	1	b	164	1	2 years	2 years
Likely	County	2	b	250	1	2 years	2 years
Lookout	County	1	b	208	1	2 years	2 years
Newell	County	2	b	1052	2	2 years	2 years
Willow Ranch	County	1	b	140	1	2 years	2 years
Alturas	City	30	a	3500	5	1 year	1 year
<b>SHASTA COUNTY</b>							
Big Bend	County	4	b	336	1	18 months	18 months
Burney	County	37	a	3264	3	18 months	1 year
Fall River Mills	County	9	a	1920	2	2½ years	1 year
Hat Creek	County	3	a	576	1	18 months	1 year
Old Station	County	3	b	576	1	18 months	18 months
<b>SISKIYOU County</b>							
Weed	City	51	a	4000	9	Not specified	1 year

\* Population Density is based on 5 mile radius for criterias a and c, and 20 mile radius for criteria b.

TABLE 5

RECOMMENDED TIME EXTENSIONS FOR  
OPEN BURNING DUMPS

Sacramento Valley Air Basin

Name of Site	Jurisdiction	Population Density (People per square mile)	Approval Criteria	People Served	Amount Burned (Tons per day)	Time Extension Requested	Time Extension Recommended
<b>BUTTE COUNTY</b>							
Butte Meadows	County	1	a	100	1	1 year	1 year
Stirling City	County	64	a	500	5	1 year	1 year
Corcow Res.	County	26	a	2000	1	1 year	1 year
Lake Madrone	County	64	a	5000	5	1 year	1 year
Forbes Town	County	64	a	5000	5	1 year	1 year
<b>COLUSA COUNTY</b>							
Maxwell	County	15	a		1.5	6 months	6 months
Princeton	County	14	a		1.5	6 months	6 months
Grimes	County	16	a		1.5	6 months	6 months
<b>EL DORADO COUNTY</b>							
Georgetown	County	17	a	1348	4	2 years	1 year
<b>GLENN COUNTY</b>							
Orland	City	25	a	4300	13.4	1 year	1 year
Willows	County	84	a	--	2	1 year	1 year
Butte City	County	16	a	--	1	1 year	1 year
Orland	County	96	a	--	2	1 year	1 year
Elk Creek	County	6	a	--	1	1 year	1 year
Willows	City	84	a	--	2	1 year	1 year
<b>NEVADA COUNTY</b>							
McCourtney	County	95	a	4000	4	1 year	1 year
Nevada City	City	164	c	7400	4	1 year	1 year
<b>PLUMAS COUNTY</b>							
Chilcoot	County	4	a	259	1	2 years	1 year
Portola	County	23	a	1625	4	2 years	1 year
Graeagle	County	8	a	600	1	2 years	1 year
Sloat	County	4	a	275	1	2 years	1 year
Quincy	County	46	a	3343	8	2 years	1 year
Meadow Valley	County	6	a	400	1	2 years	1 year
Bucks Lake	County	4	a	300	1	2 years	1 year
Tobin	County	6	a	400	1	2 years	1 year
Taylorville	County	15	a	1050	3	2 years	1 year
Greenville	County	15	a	1070	3	2 years	1 year
Canyon Dam	County	4	a	286	1	2 years	1 year
Almador	County	4	a	287	1	2 years	1 year
Chester	County	21	a	1531	3	2 years	1 year
LaPorte	County	4	a	280	1	2 years	1 year

\* Population Density is based on 5 mile radius for criterias a and c, and 20 mile radius for criteria b.

TABLE 5 (Continued)

RECOMMENDED TIME EXTENSIONS FOR  
OPEN BURNING DUMPS

## Sacramento Valley Air Basin

Name of Site	Jurisdiction	Population Density (People per square mile)	Approval Criteria	People Served	Amount Burned (Tons per day)	Time Extension Requested	Time Extension Recommended
<b>SHASTA COUNTY</b>							
Anderson- Cottonwood	County	98	a	13516	21	2 1/2 years	1 year
French Gulch	County	23	a	160	1	1 year	1 year
Igo-Ono	County	16	a	1360	1	1 year	1 year
Lakehead	County	8	a	880	2	1 year	1 year
Whitmore	County	10	a	544	1	18 months	1 year
Round Mountain	County	4	b	576	1	18 months	18 months
Shingletown	County	4	b	704	1	18 months	18 months
Clear Creek	County	176	c	5856	9	1 year	1 year
Shasta	County	119	c	1280	1	1 year	1 year
<b>SIERRA COUNTY</b>							
Loyalton	City	3	b	1000	1	Not specified	2 years
Calpine	County	2	b	--	1	2 years	2 years
Allegany	County	3	b	--	1	2 years	2 years
Sierra City	County	2	b	--	1	2 years	2 years
Ramshorn	County	3	b	--	1	2 years	2 years
<b>TEHAMA COUNTY</b>							
Paynes Creek	County	4	a	370	1	1 year	1 year
Manton	County	4	a	276	1	1 year	1 year
Mineral	County	4	a	300	1	1 year	1 year
Paskenta	County	3	a	260	1	1 year	1 year
Corning	City	32	a	10000	10	6 months	6 months
<b>YOLO COUNTY</b>							
Winters	City	7	a	2900	5	1 year	1 year
Esparto	County	8	a	2290	5	6 months	6 months
Knights Landing	County	7	a	1698	5	6 months	6 months
Guinda	County	1	a	392	1	6 months	6 months
Dunnigan	County	2	a	644	1	6 months	6 months
<b>YUBA COUNTY</b>							
Brownville	County	17	a	1330	--	1 year	1 year

\* Population Density is based on 5 mile radius for criterias a and c, and 20 mile radius for criteria b.

TABLE 6

RECOMMENDED TIME EXTENSIONS FOR  
OPEN BURNING DUMPS

## San Joaquin Valley Air Basin

Name of Site	Jurisdiction	Population Density (People per Square Mile)	Approval Criteria	People Served	Amount Burned (tons/day)	Time Extension Requested	Time Extension Recommended
<b>CALAVERAS COUNTY</b>							
Copperopolis	County	3	a	213		1 year	1 year
Angels Camp	County	50	a	3960		1 year	1 year
Murphys	County	25	a	2065		1 year	1 year
Avery	County	33	a	2655		1 year	1 year
West Point	County	28	a	2296		1 year	1 year
San Andreas	County	50	a	4032		1 year	1 year
Valley Springs	County	10	a	786		1 year	1 year
<b>KERN COUNTY</b>							
Buttonwillow	County	23	a	2340	7	1 year	1 year
Glennville	County	3	a	560	1	1 year	1 year
Lebec	County	11	a	2350	9	1 year	1 year
Lost Hills	County	5	a	610	2	1 year	1 year
Taft	County	165	c	15750	33	4 months	4 months
Wasco	County	125	c	10000	25	4 months	4 months
Shafter	County	70	a	10975	29	4 months	4 months
<b>KINGS COUNTY</b>							
Corcoran	County	133	c	10350	23	1 year	1 year
Lenoore	County	<100	a	8000	18	1 year	1 year
Avenal	County	44	a	3400	9	1 year	1 year
Kettleman City	County	8	a	650	2	1 year	1 year
Stratford	County	9	a	700	3	1 year	1 year
<b>MADERA COUNTY</b>							
Madera	City	5.1	a	21000	30	1 year	1 year
Bass Lake	County	16	a	---	--	3 months	1 year
North Folk	County	15	a	--	--	3 months	1 year
Raymond	County	3	a	--	--	3 months	1 year
<b>MARIPOSA COUNTY</b>							
Greeley Hill	County	3	b	1000	1	Not specified	2 years
Bucks Meadow	County	4	b	--	1	Not specified	2 years
Fishcamp	County	4	b	1200	1	Not specified	2 years
Mariposa	County	10	a	300	3	Not specified	1 year
Bear Valley	County	2	b	500	1	Not specified	2 years
Coulterville	County	1	b	300	1	Not specified	2 years

TABLE 6 (Continued)

RECOMMENDED TIME EXTENSIONS FOR  
OPEN BURNING DUMPS

## San Joaquin Valley Air Basin

Name of Site	Jurisdiction	Population Density* (people per square mile)	Approval Criteria	People Served	Amount Burned (tons/day)	Time Extension Requested	Time Extension Recommended
<b>MERCED COUNTY</b>							
LeGrand	County	44	a	3441	1	1 year	1 year
Snelling	County	5	a	400	1	1 year	1 year
Shaffer	County	62	a	4893	30	1 year	1 year
Stevinson	County	32	a	2496	1	1 year	1 year
Gustine	City	57	a	4393	2	1 year	1 year
Merced	City	368	c	28670	58	1 year	1 year
Los Banos	City	135	c	10500	15	1 year	1 year
Los Banos	County	135	c	10500	2	1 year	1 year
Livingston	City	124	c	9651	10	1 year	1 year
Hilmar	County	130	c	10150	--	1 year	1 year
<b>STANISLAUS COUNTY</b>							
Newman	City	26	a	2500	2	6 months	6 months
Patterson	City	60	a	5000	10	3 months	3 months
<b>TULARE COUNTY</b>							
Alpough	County	9	a	1025	2	2 years	1 year
Badger	County	7	a	600	1	3 years	1 year
Balance Rock	County	5	a	125	4	4 years	1 year
Camp Nelson	County	3	a	250	2	3 years	1 year
Earlimart	County	82	a	6570	15	2 years	1 year
Kennedy Meadows	County	1	b	100	1	5 years	2 years
Orosi	County	122	c	10600	24	2 years	1 year
Pine Flat	County	3	a	200	1	1 year	1 year
Richgrove	County	28	a	2500	6	3 years	1 year
Springville	County	14	a	1540	3	2 years	1 year
Terra Bella	County	33	a	3100	7	3 years	1 year
Tipton	County	32	a	2450	5	2 years	1 year
Tulare	County	39	a	3570	5	3 years	1 year
Visalia	County	55	a	59340	170	1 year	1 year
Woodlake	County	68	a	10650	25	3 years	1 year
Woodville	County	48	a	6260	13	2 years	1 year
Lindsay	City	67	a	5206	3	1 year	1 year
<b>TUOLUMNE COUNTY</b>							
Sonora	City	40	a	3100	2	Not specified	1 year
Jamestown	County	97	a	3000	3.4	1 year	1 year
Tuolumne	County	66	a	3000	3.4	1 year	1 year
Big Oak Flat	County	8	a	600	1	1 year	1 year
Pinecrest	County	6	a	450	1	1 year	1 year

\* Population Density is based on 5 mile radius for criterias a and c, and 20 mile radius for criteria b.

TABLE 7

RECOMMENDED TIME EXTENSIONS FOR  
OPEN BURNING DUMPS  
San Diego Air Basin

Name of Site	Jurisdiction	Population Density* (people per square mile)	Approval Criteria	People Served	Amount Burned (tons per day)	Time Extension Requested	Time Extension Recommended
SAN DIEGO							
Palomar Mountain	County	11	a	200	1	1 year	1 year
Sunshine Summit	County	3	a	700	2	1 year	1 year
Ocotello Wells	County	1	a	200	1	1 year	1 year
Julian	County	6	a	1500	4	1 year	1 year
Campo	County	5	a	500	4	1 year	1 year
Jacumba	County	5	a	500	1	1 year	1 year

\* Population Density is based on 5 mile radius for criterias a and c, and 20 mile radius for criteria b.



TABLE 8

RECOMMENDED TIME EXTENSIONS FOR  
OPEN BURNING DUMPS  
South Coast Air Basin

Name of Site	Jurisdiction	Population Density (people per square mile)	Approval Criteria	People Served	Amount Burned (tons per day)	Time Extension Requested	Time Extension Recommended
LOS ANGELES COUNTY Avalon	City	2	b	1720	5	2 years	2 years
SAN BERNARDINO COUNTY Morongo Valley		40	a	3000	15	1 year	1 year

TABLE 9

RECOMMENDED TIME EXTENSIONS FOR  
OPEN BURNING DUMPS  
Southeast Desert Air Basin

Name of Site	Jurisdiction	Population Density* (people per square mile)	Approval Criteria	People Served	Amount Burned (tons per day)	Time Extension Requested	Time Extension Recommended
<b>IMPERIAL COUNTY</b>							
Brawley	County	>100	c	--	30	18 months	1 year
Calipatria	City	2	b	1890	1	18 months	18 months
Calexico	City	>100	c	--	30	6 months	6 months
Holtville	City	64.5	a	--	4	2½ years	1 year
Holtville Air Strip	County	3.0	a	--	2	2½ years	1 year
Hot Spa	County	1.1	b	--	1	2½ years	2 years
Imperial	County	5.8	a	--	3	2½ years	1 year
Niland	County	4.7	a	--	1	2½ years	1 year
Ocotillo	County	7.9	a	--	1	2½ years	1 year
Palo Verde	County	4.5	a	--	1	2½ years	1 year
Picacho	County	9.5	a	--	--	2½ years	1 year
Salton City	County	3.9	b	--	1	2½ years	1 year
<b>KERN COUNTY</b>							
Boron	County	38	a	3790	9	1 year	1 year
Mojave	County	37	a	2700	12	1 year	1 year
Randsburn	County	8	a	610	1	1 year	1 year
Rosamond	County	37	a	3400	9	1 year	1 year
Techacapi	County	70	a	6020	18	1 year	1 year
<b>RIVERSIDE COUNTY</b>							
Thermal	County	81	a	10213	14	6 months	6 months
Mecca	County	27	a	3000	8	6 months	6 months
<b>SAN BERNARDINO COUNTY</b>							
Adelanto	County	28	a	2115	25	2 years	1 year
Apple Valley	County	90	a	6700	15	1 year	1 year
Baker	County	2	b	1000	5	2 years	2 years
Barstow	County	232	c	--	15	9 months	9 months
Daggett	County	26	a	1920	5	2 years	1 year
Kramer	County	3	b	500	1	2 years	2 years
Joshua Tree	County	40	a	3000	5	1 year	1 year
Lucerne Valley	County	30	a	2260	7	2 years	1 year
Lenwood Hinkley	County	51	a	3834	--	1 year	1 year
Newberry	County	3	b	710	2	2 years	2 years
Needles	County	30	a	4051	4	2 years	1 year
Parker	County	2	b	1000	2	2 years	2 years
Phelan	County	7	a	500	2	2 years	1 year
Trona	County	51	a	3828	8	2 years	1 year
Twenty Nine Palms	County	75	a	5667	2	1 year	1 year
Victorville	County	145	c	10845	30	9 months	9 months
Yermo	County	17	a	1304	5	2 years	1 year
Landers	County	7	a	500	5	1 year	1 year
<b>SAN DIEGO COUNTY</b>							
Borego Springs	County	4	a	100	3	1 year	1 year

\* Population Density is based on 5 mile radius for criterion a and c, and 20 mile radius for criterion b.

STATE OF CALIFORNIA

AIR RESOURCES BOARD

RESOLUTION 71-96A

December 15, 1971

WHEREAS, Section 39296 of the Health and Safety Code prohibits use of open fires for the purpose of disposal of petroleum wastes, demolition debris, tires, tar, trees, wood waste, or other combustible or flammable solid or liquid waste; or for metal salvage or burning of automobile bodies after December 31, 1971; and

WHEREAS, Section 39297.4 of the Health and Safety Code directs the Air Resources Board to permit a city, city and county, or county to use open outdoor fires for a limited time only, in its operation of a solid waste dump, upon the finding that because of sparse population in the geographical area and economic and technical difficulties, the solid waste dump should be so operated; and

WHEREAS, there are approximately three hundred and seventy-nine city and county dumps using open burning as a means of solid waste disposal; and

WHEREAS, the Board at its May 19, 1971 meeting adopted guidelines for receiving applications from cities and counties for permission to continue open burning at dumps; and

WHEREAS, the Board at its November 17, 1971 meeting approved time extensions for 235 disposal sites to use open burning for the purpose of disposal of solid waste after December 31, 1971;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board grants limited time extensions as recommended for the additional dumps listed in attached Table 1.

**TABLE 1**  
**RECOMMENDED TIME EXTENSIONS FOR**  
**OPEN BURNING DUMPS**

Attachment to  
Resolution 71-96A  
December 15, 1971

Name of Site	Jurisdiction	Population Density (people per square mile)	Approval Criteria	People Served	Amount Burned (tons per day)	Time Extension Requested	Time Extension Recommended
<b>AMADOR COUNTY</b>							
Ione	County	89	a	2,869	4	1 year	1 year
Jackson	County	88	a	3,111	5	1 year	1 year
Sutter Creek	County	99	a	2,574	4	1 year	1 year
Plymouth	County	90	a	1,648	1	1 year	1 year
Pine Grove	County	88	a	1,900	1	1 year	1 year
Silver Lake	County	50	a	1,000	1	1 year	1 year
<b>EL DORADO COUNTY</b>							
Omo Ranch	County	7	a	548	1	7 months	7 months
<b>INYO COUNTY</b>							
Rovanna	County	8	a	610	2	5 years	1 year
Bishop Creek	County	35	a	2,750	1	5 years	1 year
Big Pine	County	14	a	1,145	3	5 years	1 year
Independence	County	2	b	2,870	2	5 years	2 years
Lone Pine	County	2	b	3,010	4	5 years	2 years
Olancho	County	1	b	560	1	5 years	2 years
Keeler	County	2	b	2,090	1	5 years	2 years
Shoshone	County	1	b	590	1	5 years	2 years
Tecopa	County	5	b	590	1	5 years	2 years
<b>SANTA BARBARA COUNTY</b>							
Cuyama Valley	County	11	a	700	1	1 year	1 year
<b>SISKIYOU COUNTY</b>							
Fort Jones	City	4	b		1	2 years	1 year
Yreka	City	85	a	16,000	17	1 year	1 year
<b>TRINITY COUNTY</b>							
Douglas City	County	1	b	300	1	2 years	1 year
Carrville	County	1	b	425	1	2 years	1 year
Ruth	County	1	b	200	1	2 years	1 year
Mad River	County	1	b	175	1	2 years	1 year
Burnt Ranch	County	1	b	560	1	2 years	1 year
Junction City	County	1	b	200	1	2 years	1 year
Hyampom	County	1	b	200	1	2 years	1 year
Forest Glen	County	1	b	200	1	2 years	1 year
Hayfork	County	2	b	2,130	2	2 years	1 year
Weaverville	County	3	b	3,400	4	2 years	1 year

\* Population Density is based on 5 mile radius for criteria a, and 20 mile radius for criteria b.

STATE OF CALIFORNIA

AIR RESOURCES BOARD

RESOLUTION 71-96B

December 15, 1971

WHEREAS, Section 39296 of the Health and Safety Code prohibits use of open fires for the purpose of disposal of petroleum wastes, demolition debris, tires, tar, trees, wood waste, or other combustible or flammable solid or liquid waste; or for metal salvage or burning of automobile bodies after December 31, 1971; and

WHEREAS, Section 39297.4 of the Health and Safety Code directs the Air Resources Board to permit a city, city and county, or county to use open outdoor fires for a limited time only, in its operation of a solid waste dump, upon the finding that because of sparse population in the geographical area and economic and technical difficulties, the solid waste dump should be so operated; and

WHEREAS, the Air Resources Board has received requests for time extensions for the Orange Cove and Meadow Lake dump sites in Fresno County; and

WHEREAS, open burning at solid waste disposal sites is in violation of the rules of the Fresno Air Pollution Control District; and

WHEREAS, the Fresno County Air Pollution Control District Appeals Hearing Board is unanimously opposed to an extension of burning at both disposal sites;

NOW, THEREFORE, BE IT RESOLVED, That the Air Resources Board denies a limited time extension for the Orange Cove dump site in Fresno County.

BE IT FURTHER RESOLVED, That final consideration of the Meadow Lake dump be deferred, and that it be granted a 60-day extension in the interim.

STATE OF CALIFORNIA

AIR RESOURCES BOARD

RESOLUTION 71-96D

February 16, 1972

WHEREAS, Section 39296 of the Health and Safety Code prohibits use of open fires for the purpose of disposal of petroleum wastes, demolition debris, tires, tar, trees, wood waste, or other combustible or flammable solid or liquid waste; or for metal salvage or burning of automobile bodies after December 31, 1971; and

WHEREAS, Section 39297.4 of the Health and Safety Code directs the Air Resources Board to permit a city, city and county, or county to use open outdoor fires for a limited time only, in its operation of a solid waste dump, upon the finding that because of sparse population in the geographical area and economic and technical difficulties, the solid waste dump should be so operated; and

WHEREAS, the Board at its May 19, 1971 meeting adopted guidelines for receiving applications from cities and counties for permission to continue open burning at dumps; and

WHEREAS, the Board at its September 15, 1971 meeting adopted guidelines for approving requests for limited time extensions to cities and counties to continue open burning at dumps; and

WHEREAS, the open burning dumps listed in attached Table 1 are within the guidelines set forth by the Board;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board grants limited time extensions for the dumps listed in attached Table 1 for the time extensions recommended.

TABLE 1  
RECOMMENDED TIME EXTENSIONS FOR  
OPEN BURNING DUMPS

Attachment to:  
Resolution 71-96D  
February 16, 1972

Name of Site	Jurisdiction	Population Density (people per square mile)	Approval Criteria	People Served	Amount Burned (tons per day)	Time Extension Requested	Time Extension Recommended
<b>SISKIYOU COUNTY</b>							
Tulelake	County	25	a	1,400	2	1 year	1 year
Dorris	County	20	a	1,100	1	1 year	1 year
MacDoel	County	3	b	500	1	1 year	1 year
Tennant	County	2	b	100	1	1 year	1 year
Gazelle	County	3	b	400	1	1 year	1 year
Grenada	County	3	b	700	1	1 year	1 year
Little Shasta	County	3	b	200	1	1 year	1 year
Hornbrook	County	3	b	600	1	1 year	1 year
Copco	County	3	b	200	1	1 year	1 year
Oak Knoll	County	3	b	200	1	1 year	1 year
Scott Bar	County	2	b	150	1	1 year	1 year
Happy Camp	County	24	a	1,500	1	1 year	1 year
Greenview	County	2	b	200	1	1 year	1 year
Etna	County	20	a	1,100	1	1 year	1 year
Callahan	County	3	b	150	1	1 year	1 year
Cecilville	County	2	b	100	1	2 years	1 year
Sawyers Bar	County	2	b	100	1	2 years	1 year
Fks. of Salmon	County	2	b	100	1	2 years	1 year
Somes Bar	County	2	b	100	1	2 years	1 year
McCloud	County	30	a	2,000	2	2 years	1 year
<b>TUOLUMNE COUNTY</b>							
Chinese Camp	County	15	a	900	1	1 year	1 year
<b>MARIPOSA COUNTY</b>							
Exchequer	County	1	a	65	1	1 year	1 year
Barrett Cove	County	1	a	30	1	1 year	1 year
Horseshoe Bend	County	1	a	110	1	1 year	1 year
<b>SANTA CRUZ COUNTY</b>							
Davenport	County	25	a	285	1	1 year	1 year
<b>HUMBOLDT COUNTY</b>							
Petrolia	County	15	a	1,000	1	6 months	6 months
Fruitland	County	14	a	1,000	1	6 months	6 months
Blocksburg	County	16	a	1,000	1	6 months	6 months
Alderpoint	County	17	a	1,000	1	6 months	6 months
Thorn	County	18	a	1,000	1	6 months	6 months
Garberville	County	20	a	5,000	4	6 months	6 months

\* Population Density is based on 5 mile radius for criteria a and c, and 20 mile radius for criteria b.

State of California

AIR RESOURCES BOARD

RESOLUTION 71-96E

February 16, 1972

WHEREAS, Section 39296 of the Health and Safety Code prohibits use of open fires for the purpose of disposal of petroleum wastes, demolition debris, tires, tar, trees, wood waste, or other combustible or flammable solid or liquid waste; or for metal salvage or burning of automobile bodies after December 31, 1971; and

WHEREAS, Section 39297.4 of the Health and Safety Code directs the Air Resources Board to permit a city, city and county, or county to use open outdoor fires for a limited time only, in its operation of a solid waste dump, upon the finding that because of sparse population in the geographical area and economic and technical difficulties, the solid waste dump should be so operated; and

WHEREAS, the Board at its November 17, 1971 Meeting granted a one year time extensions for Lost Hills Disposal site in Kern County; and

WHEREAS, the County of Kern has lost the property lease for the disposal site and has been forced to move the site location; and

WHEREAS, the new location is located in an area where the population density is 5 people per square mile within a 5-mile radius of the dump site;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board grants a transfer of the limited time extension for the abandon Lost Hills site to the new Lost Hills site.



STATE OF CALIFORNIA

AIR RESOURCES BOARD

RESOLUTION 71-96F

February 16, 1972

WHEREAS, Section 39296 of the Health and Safety Code prohibits use of open fires for the purpose of disposal of petroleum wastes, demolition debris, tires, tar, trees, wood waste, or other combustible or flammable solid or liquid waste; or for metal salvage or burning of automobile bodies after December 31, 1971; and

WHEREAS, Section 39297.4 of the Health and Safety Code directs the Air Resources Board to permit a city, city and county, or county to use open outdoor fires for a limited time only, in its operation of a solid waste dump, upon the finding that because of sparse population in the geographical area and economic and technical difficulties, the solid waste dump should be so operated; and

WHEREAS, the Board at its November 17, 1971 meeting approved a time extension for the City of Willits' disposal site to use open burning for the purpose of disposal of solid waste after December 31, 1971; and

WHEREAS, the Board has received since November 17, 1971 additional information stating the City of Willits dump site has been a sanitary landfill for two years; and

WHEREAS, the Mendocino County Air Pollution Control District is opposed to an extension of burning at the dump site; and

WHEREAS, the Willits City Council voted unanimously to withdraw the extension request;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board rescinds its prior approval and denies to the City of Willits a limited time extension to use open burning in its waste disposal site.

STATE OF CALIFORNIA

AIR RESOURCES BOARD

RESOLUTION 71-96G

March 15, 1972

WHEREAS, Section 39296 of the Health and Safety Code prohibits use of open fires for the purpose of disposal of petroleum wastes, demolition debris, tires, tar, trees, wood waste, or other combustible or flammable solid or liquid waste; or for metal salvage or burning of automobile bodies after December 31, 1971; and

WHEREAS, Section 39297.4 of the Health and Safety Code directs the Air Resources Board to permit a city, city and county, or county to use open outdoor fires for a limited time only, in its operation of a solid waste dump, upon the finding that because of sparse population in the geographical area and economic and technical difficulties, the solid waste dump should be so operated; and

WHEREAS, the Board at its May 19, 1971 meeting adopted guidelines for receiving applications from cities and counties for permission to continue open burning at dumps; and

WHEREAS, the Board at its September 15, 1971 meeting adopted guidelines for approving requests for limited time extensions to cities and counties to continue open burning at dumps; and

WHEREAS, the County of Colusa has applied for a time extension for the Stonyford dump site until July 1, 1972; and

WHEREAS, the Stonyford dump site is within the guidelines set forth by the Board;

NOW THEREFORE, BE IT RESOLVED, that the Air Resources Board grant time extension for the Stonyford dump site until July 1, 1972.

STATE OF CALIFORNIA

AIR RESOURCES BOARD

RESOLUTION 71-96H

March 15, 1972

WHEREAS, Section 39296 of the Health and Safety Code prohibits use of open fires for the purpose of disposal of petroleum wastes, demolition debris, tires, tar, trees, wood waste, or other combustible or flammable solid or liquid waste; or for metal salvage or burning of automobile bodies after December 31, 1971; and

WHEREAS, Section 39297.4 of the Health and Safety Code directs the Air Resources Board to permit a city, city and county, or county to use open outdoor fires for a limited time only, in its operation of a solid waste dump, upon the finding that because of sparse population in the geographical area and economic and technical difficulties, the solid waste dump should be so operated; and

WHEREAS, the Board at its November 17, 1971 meeting granted a time extension until March 31, 1972 for the City of Patterson to use open fires for the purpose of disposal of solid waste at the city dump site; and

WHEREAS, the County of Stanislaus is presently in the process of acquiring a sanitary landfill site which will serve the City of Patterson; and

WHEREAS, the City of Patterson has no other method available for the disposal of solid waste;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board grants an additional time extension until October 1, 1972 for the City of Patterson dump site.

State of California

AIR RESOURCES BOARD

RESOLUTION 71-96I

April 19, 1972

WHEREAS, Section 39296 of the Health and Safety Code prohibits use of open fires for the purpose of disposal of petroleum wastes, demolition debris, tires, tar, trees, wood waste, or other combustible or flammable solid or liquid waste; or for metal salvage or burning of automobile bodies after December 31, 1971; and

WHEREAS, Section 39297.4 of the Health and Safety Code directs the Air Resources Board to permit a city, city and county, or county to use open outdoor fires for a limited time only, in its operation of a solid waste dump, upon the finding that because of sparse population in the geographical area and economic and technical difficulties, the solid waste dump should be so operated; and

WHEREAS, the Board at its May 19, 1971 meeting adopted guidelines for receiving applications from cities and counties for permission to continue open burning at dumps; and

WHEREAS, the Board at its September 15, 1971 meeting adopted guidelines for approving requests for limited time extensions to cities and counties to continue open burning at dumps; and

WHEREAS, the County of Trinity has applied for a time extension for the Big Bar and Denny dump sites; and

WHEREAS, the Big Bar and Denny dump sites are within the guidelines set forth by the Board;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board grant time extension for the Big Bar and Denny dump sites until January 1, 1973.

State of California

AIR RESOURCES BOARD

RESOLUTION 71-96J

April 19, 1972

WHEREAS, Section 39296 of the Health and Safety Code prohibits use of open fires for the purpose of disposal of petroleum wastes, demolition debris, tires, tar, trees, wood waste, or other combustible or flammable solid or liquid waste; or for metal salvage or burning of automobile bodies after December 31, 1971; and

WHEREAS, Section 39297.4 of the Health and Safety Code directs the Air Resources Board to permit a city, city and county, or county to use open outdoor fires for a limited time only, in its operation of a solid waste dump, upon the finding that because of sparse population in the geographical area and economic and technical difficulties, the solid waste dump should be so operated; and

WHEREAS, the Board at its November 17, 1971 meeting granted a time extension until March 31, 1972 for the County of Madera to use open fires for the purpose of disposal of solid waste at Bass Lake, North Fork, and Raymond county dump sites; and

WHEREAS, the County of Madera is presently in the process of acquiring a sanitary landfill site which will serve the Bass Lake, North Fork, and Raymond areas; and

WHEREAS, the County of Madera sanitary landfill is not yet in operation;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board grants an additional time extension until July 1, 1972 for the Bass Lake, North Fork, and Raymond dump sites.

State of California

AIR RESOURCES BOARD

RESOLUTION 71-96K

May 17, 1972

WHEREAS, Section 39296 of the Health and Safety Code prohibits use of open fires for the purpose of disposal of petroleum wastes, demolition debris, tires, tar, trees, wood waste, or other combustible or flammable solid or liquid waste; or for metal salvage or burning of automobile bodies after December 31, 1971; and

WHEREAS, Section 39297.4 of the Health and Safety Code directs the Air Resources Board to permit a city, city and county, or county to use open outdoor fires for a limited time only, in its operation of a solid waste dump, upon the finding that because of sparse population in the geographical area and economic and technical difficulties, the solid waste dump should be so operated; and

WHEREAS, the Board at its November 17, 1971 meeting granted a time extension until April 30, 1972 for the County of Kern to use open fires for the purpose of disposal of solid waste at the Taft Dump site; and

WHEREAS, the County of Kern is presently in the process of acquiring a sanitary landfill site which will serve the Taft area;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board grants the County of Kern an additional time extension until August 1, 1972 for the Taft dump site.

State of California

AIR RESOURCES BOARD

RESOLUTION 71-96L

May 17, 1972

WHEREAS, Section 39296 of the Health and Safety Code prohibits use of open fires for the purpose of disposal of petroleum wastes, demolition debris, tires, tar, trees, wood waste, or other combustible or flammable solid or liquid waste; or for metal salvage or burning of automobile bodies after December 31, 1971; and

WHEREAS, Section 39297.4 of the Health and Safety Code directs the Air Resources Board to permit a city, city and county, or county to use open outdoor fires for a limited time only, in its operation of a solid waste dump, upon the finding that because of sparse population in the geographical area and economic and technical difficulties, the solid waste dump should be so operated; and

WHEREAS, the Board at its November 17, 1971 meeting granted a time extension until April 30, 1972 for the County of Kern to use open fires for the purpose of disposal of solid waste at the Wasco and Shafter dump site; and

WHEREAS, the County of Kern is presently in the process of acquiring a sanitary landfill site which will serve the Wasco and Shafter areas;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board grants the County of Kern an additional time extension until July 1, 1972 for the Wasco and Shafter dump sites.

State of California

AIR RESOURCES BOARD

RESOLUTION 71-96M

May 17, 1972

WHEREAS, Section 39296 of the Health and Safety Code prohibits use of open fires for the purpose of disposal of petroleum wastes, demolition debris, tires, tar, trees, wood waste, or other combustible or flammable solid or liquid waste; or for metal salvage or burning of automobile bodies after December 31, 1971; and

WHEREAS, Section 39297.4 of the Health and Safety Code directs the Air Resources Board to permit a city, city and county, or county to use open outdoor fires for a limited time only, in its operation of a solid waste dump, upon the finding that because of sparse population in the geographical area and economic and technical difficulties, the solid waste dump should be so operated; and

WHEREAS, the Board at its November 17, 1971 meeting granted a time extension until June 30, 1972 for the City of Newman to use open fires for the purpose of disposal of solid waste at the city dump site; and

WHEREAS, the County of Stanislaus is presently in the process of acquiring a sanitary landfill site which will serve the City of Newman; and

WHEREAS, the City of Newman has no other method available for the disposal of solid waste;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board grants an additional time extension until October 1, 1972 for the City of Newman dump site.



State of California

AIR RESOURCES BOARD

RESOLUTION 71-96N

June 21, 1972

WHEREAS, Section 39296 of the Health and Safety Code prohibits use of open fires for the purpose of disposal of petroleum wastes, demolition debris, tires, tar, trees, wood waste, or other combustible or flammable solid or liquid waste; or for metal salvage or burning of automobile bodies after December 31, 1971; and

WHEREAS, Section 39297,4 of the Health and Safety Code directs the Air Resources Board to permit a city, city and county, or county to use open outdoor fires for a limited time only, in its operation of a solid waste dump, upon the finding that because of sparse population in the geographical area and economic and technical difficulties, the solid waste dump should be so operated; and

WHEREAS, the Board granted a time extension until July 1, 1972 for the County of Madera to use open fires for the purpose of disposal of solid waste at Bass Lake, North Fork, and Raymond county dump sites; and

WHEREAS, the County of Madera is presently in the process of acquiring a sanitary landfill site which will serve the Bass Lake, North Fork, and Raymond areas; and

WHEREAS, the County of Madera sanitary landfill is not yet in operation;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board grants Madera County an additional time extension until October 1, 1972 for the Bass Lake, North Fork, and Raymond dump sites.

State of California

AIR RESOURCES BOARD

RESOLUTION 71-960

June 21, 1972

WHEREAS, Section 39296 of the Health and Safety Code prohibits use of open fires for the purpose of disposal of petroleum wastes, demolition debris, tires, tar, trees, wood waste, or other combustible or flammable solid or liquid waste; or for metal salvage or burning of automobile bodies after December 31, 1971; and

WHEREAS, Section 39297.4 of the Health and Safety Code directs the Air Resources Board to permit a city, city and county, or county to use open outdoor fires for a limited time only, in its operation of a solid waste dump, upon the finding that because of sparse population in the geographical area and economic and technical difficulties, the solid waste dump should be so operated; and

WHEREAS, the Board at its November 17, 1971 meeting granted a time extension until July 1, 1972 for the County of Sonoma to use open fires for the purpose of disposal of solid waste at Occidental county dump site; and

WHEREAS, the County of Sonoma is presently in the process of acquiring a sanitary landfill site which will serve the Occidental area; and

WHEREAS, the County of Sonoma sanitary landfill is not yet in operation;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board grants Sonoma County an additional time extension until January 1, 1973 for the Occidental dump site.

State of California

AIR RESOURCES BOARD

RESOLUTION 71-96P

June 21, 1972

WHEREAS, Section 39296 of the Health and Safety Code prohibits use of open fires for the purpose of disposal of petroleum wastes, demolition debris, tires, tar, trees, wood waste, or other combustible or flammable solid or liquid waste; or for metal salvage or burning of automobile bodies after December 31, 1971; and

WHEREAS, Section 39297.4 of the Health and Safety Code directs the Air Resources Board to permit a city, city and county, or county to use open outdoor fires for a limited time only, in its operation of a solid waste dump, upon the finding that because of sparse population in the geographical area and economic and technical difficulties, the solid waste dump should be so operated; and

WHEREAS, the Board at its November 17, 1971 meeting granted a time extension until July 1, 1972 for the County of Yolo to use open fires for the purpose of disposal of solid waste at the Knights Landing county dump site; and

WHEREAS, the County of Yolo is presently in the process of acquiring a sanitary landfill site which will serve the Knights Landing area; and

WHEREAS, the County of Yolo sanitary landfill is not yet in operation;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board grants Yolo County an additional time extension until January 1, 1973 for the Knights Landing dump site.

State of California

AIR RESOURCES BOARD

Resolution 71-97

October 20, 1971

WHEREAS, Volkswagen of America, Inc., submitted for Audi NSU Auto Union AG, a subsidiary company, an application and all test data for approval of the emission control system for its 1972-model Audi vehicles;

WHEREAS, the applicant's emission control system is described as follows:

Engine-modification exhaust control system with major elements:

- (1) carburetor with specified flow rates,
- (2) distributor with specified centrifugal advance and vacuum retard characteristics,
- (3) recommended maintenance; and

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Article 2;

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Issue a resolution of approval to Audi NSU Auto Union AG, a subsidiary of Volkswagen, with respect to the 1972-model Audi vehicles, 6,000 pounds or less gross vehicle weight.

<u>Engine Family</u>	<u>Engine Size Cubic Inches</u>	<u>Vehicle Model</u>
Audi	107.5 114.5	Audi

State of California

AIR RESOURCES BOARD

Staff Report

1972 Emission Control Systems Approval

Audi NSU Auto Union, AG

October 20, 1971

Volkswagen of America, Inc., has submitted an application for approval of the exhaust emission control systems of Audi NSU Auto Union AG, a subsidiary company, to be used on its 1972-model Audi vehicles less than 6,001 pounds gross vehicle weight. The applicant tested these vehicles and met the 1972 exhaust emission standards using the optional test procedure.

The applicant's emission control system ~~is~~ of the engine-modification type of exhaust emission control system.

Projected Emissions of Each Test Vehicle

Engine Family Identification	Engine Size Cubic Inches	Control System	Vehicle Number	Projected Exhaust Emissions at 50,000 Miles		
				HC-gm /mi	CO-gms/mi	NO <sub>x</sub> -gms/m
Audi	114.5	EM	IN-AH96	1.58*	28.9*	2.33**
	114.5	EM	IN-AJ6	1.35	26.6	2.44
	114.5	EM	IN-AH71	1.59	24.3	1.95
	114.5	EM	IN-AJ51	1.52*	27.0*	2.77**
	107.5	EM	IN-AJ34	2.05*	27.8*	2.78**

EM = Engine Modification

\* = EPA Confirmation Test

\*\* = Ethyl Laboratory Confirmation Test

Each test vehicle met the 1972-model year emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide and 3.2 grams per mile oxides of nitrogen.

Confirmatory tests conducted at the Environmental Protection Agency Laboratory and Ethyl Laboratory substantiate the manufacturer's data as noted above.

Based on the test data and other information submitted by the applicant, the staff finds that the Audi NSU Auto Union AG exhaust emission control system meets California requirements for vehicles under 6,001 pounds gross vehicle weight for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-97.

State of California

AIR RESOURCES BOARD

Resolution 71-98

October 20, 1971

WHEREAS, Jaguar Cars, Ltd., a division of British Leyland Motor Corporation, England has submitted an application and all required test data for approval of the emission control system for its 1972-model vehicles;

WHEREAS, the applicant's emission control system is described as follows:

Air-injection type exhaust emission control system with major elements:

- (1) rotary-vane air pump,
- (2) air injection into each exhaust port and anti-backfire valve,
- (3) temperature-controlled air intake system (V12),
- (4) distributor with specified advance characteristics,
- (5) duplex intake manifold (4.2L),
- (6) carburetor with specified flow rates,
- (7) recommended maintenance; and

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Articles 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080 of the Health and Safety Code,

Issue a resolution of approval to the Jaguar Cars, Ltd., a division of British Leyland Motor Corporation with respect to the 1972-model vehicles, 6,000 pounds or less gross vehicle weight.

Engine Family  
Identification

Engine Size  
Cubic Inches

Vehicle  
Models

4.2L

258

XJ6 Sedan  
XK-E Series III

V12

326

XJ12 Sedan  
XK-E Series III

State of California

AIR RESOURCES BOARD

Staff Report

1972 Emission Control Systems Approval

Jaguar Cars, Limited

October 20, 1971

Jaguar Cars, Limited, a division of British Leyland, Ltd. has submitted an application for approval of the emission control systems to be used on its 1972-model Jaguar vehicles. The applicant elected to qualify these vehicles for meeting the 1972 exhaust emission standards by the optional test procedure.

The applicant's emission control system is an air-injection type.

Projected Emissions of Each Test Vehicle

Engine Family Identification	Engine Size Cubic Inches	Vehicle No.	Projected Exhaust Emissions at 50,000 Miles		
			HC-gms/mi	CO-gms/mi	NO <sub>2</sub> -gms/mi
4.2L	258	1W70001	0.4*	33*	1.4**
4.2L	258	1G1008	1.1	28	2.1
V12	326	1S70002	2.4*	22*	1.6**
V12	326	1L11717	2.7	31	2.9

\*E.P.A. Laboratory Data

\*\*Motor Industries Research Association

Each test vehicle met the 1972-model year emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide and 3.2 grams per mile oxides of nitrogen.

Based on the test data and other information submitted by the applicant, the staff finds that the Jaguar exhaust emission control system meets California requirements for vehicles under 6,000 pounds gross vehicle weight for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-98.

State of California

AIR RESOURCES BOARD

Resolution 71-99

October 20, 1971

WHEREAS, in 1969, the California Legislature added Section 39052 (q), Section 39110 and Section 39111 to the Health and Safety Code requiring the Air Resources Board to adopt regulations specifying the manner in which motor vehicles modified or altered to use fuels other than gasoline or diesel be emission tested;

WHEREAS, on November 9, 1969, the Air Resources Board adopted, "California Exhaust Emission Standards and Test Procedures for Motor Vehicles Modified to Use Liquified Petroleum Gas or Natural Gas Fuel;"

WHEREAS, Beam Products Mfg. Company has submitted an application and all test data for approval of its emission control system for vehicles modified to utilize liquified petroleum Gas (LPG); and

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Article 7,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080 of the Health and Safety Code,

Issue this resolution of approval for Beam Products Mfg. Company carburetor model listed below for use in gasoline-powered vehicles under 6,001 pound gross vehicle weight utilizing liquified petroleum gas with engine size as listed,

<u>Carburetor Model</u>	<u>Engine Size Class</u>	<u>Engine Size Displacement Cubic Inches</u>
5C-100	(e)	300-375



State of California

AIR RESOURCES BOARD

Resolution 71-99-A

October 20, 1971

WHEREAS, in 1970, the California Legislature added Section 8657 to the California Revenue and Taxation Code which states that no motor fuel tax shall be imposed upon motor vehicles modified to use liquified petroleum gas or natural gas and approved by the State Air Resources Board as meeting the emission standards set forth in subdivisions (a) and (b) of Section 39102 and Section 9102.5 of the Health and Safety Code;

WHEREAS, the Air Resources Board has approved the Beam Products Mfg. Company modification system for converting gasoline engines to use liquified petroleum gas; and

WHEREAS, the Board found that the system complied with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Article 7,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Find that Beam Product's carburetor model listed below utilizing liquified petroleum gas (LPG) will meet the emission requirements of Section 8657 of the Revenue and Taxation Code for gasoline-powered vehicles under 6,001 pounds gross vehicle weight:

<u>Carburetor Model</u>	<u>Engine Size Class</u>	<u>Engine Size Displacement Cubic Inches</u>
5C-100	(e)	300-375

State of California

AIR RESOURCES BOARD

Resolution 71-99-B

November 17, 1971

WHEREAS, in 1969, the California Legislature added Section 39052 (q), Section 39110 and Section 39111 to the Health and Safety Code requiring the Air Resources Board to adopt regulations specifying the manner in which motor vehicles modified or altered to use fuels other than gasoline or diesel be emission tested;

WHEREAS, on November 9, 1969, the Air Resources Board adopted, "California Exhaust Emission Standards and Test Procedures for Motor Vehicles Modified to Use Liquefied Petroleum Gas or Natural Gas Fuel;"

WHEREAS, Beam Products Mfg. Company has submitted an application and all test data for approval of its emission control system for vehicles modified to utilize liquefied petroleum Gas (LPG); and

WHEREAS, the Board finds that the system complies with the Health and Safety Code Sections 39052 (q) and 39110 and the California Administrative Code, Title 13, Section 2600,

NOW, THEREFORE, BE IT RESOLVED, That the Air Resources Board approve the Beam Products Mfg. Company carburetor model listed below for use in gasoline-powered vehicles utilizing liquefied petroleum gas with engine sizes as listed:

<u>Carburetor Model</u>	<u>Engine Size Class</u>	<u>Engine Size Displacement Cubic Inches</u>
5C-200	(e)	300-375
5C-200	(f)	Over 375

State of California

AIR RESOURCES BOARD

Staff Report

Beam Products Mfg. Company

Application for Motor Vehicles Modified  
To Use Liquefied Petroleum Gas

November 17, 1971

Beam Products Mfg. Company has submitted an application for approval of its emission control system to be used on vehicles modified to use liquefied petroleum gas. Basically, this system consists of a pressure regulator and a specially designed carburetor.

The data submitted is shown below:

<u>Carburetor Model</u>	<u>Engine Size Class</u>	<u>Test Engine Size Cu.In.</u>	<u>Test Vehicle</u>	<u>HC-gms/mi</u>	<u>CO-gms/mi</u>	<u>NO<sub>2</sub>-gms/mi</u>
5C-200	(e)	350	1970 Chev	1.2	0.4	0.7
5C-200	(f)	400	1971 Ford	1.3	3.8	0.8

Each test vehicle in the fleet met the 1971 emission standards of 2.2 grams per mile hydrocarbons, 23 grams per mile carbon monoxide, and 4 grams per mile oxides of nitrogen.

The emission results on liquefied petroleum gas also meet the 1974-model year standards and, therefore, meet the emission requirements of Section 8657 of the Revenue and Taxation Code.

Based on the test data and other information submitted by the applicant, the staff finds that the Beam Product's emission control system, to be used on vehicles modified to use liquefied petroleum gas, meets California requirements. The staff, therefore, recommends the adoption of Resolution 71-99-B and 71-99-C.

State of California

AIR RESOURCES BOARD

Resolution 71-99-C

November 17, 1971

WHEREAS, in 1970, the California Legislature added Section 8657 to the California Revenue and Taxation Code which states that no motor fuel tax shall be imposed upon motor vehicles modified to use liquefied petroleum gas or natural gas and approved by the State Air Resources Board as meeting the emission standards act set forth in subdivisions (a) and (b) of Section 39102 and Section 39102.5 of the Health and Safety Code;

WHEREAS, the Air Resources Board has approved the Beam Products Mfg. Company system for converting gasoline engines to use liquefied petroleum gas; and

WHEREAS, the Board found that the system complied with the California Administrative Code, Title 13, Section 2600,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Find that Beam Product's carburetor model listed below utilizing liquefied petroleum gas (LPG) will meet the emission requirements of Section 8657 of the Revenue and Taxation Code for gasoline-powered vehicles;

<u>Carburetor Model</u>	<u>Engine Size Class</u>	<u>Engine Size Displacement Cubic Inches</u>
5C-200	(e)	300-375
5C-200	(f)	Over 375

State of California

AIR RESOURCES BOARD

Resolution 71-100

October 20, 1971

WHEREAS, Isuzu Motors Limited, Japan, submitted an application and all required test data for approval of the emission control system for its 1972-model Isuzu vehicles;

WHEREAS, the applicant's exhaust control system is described as follows:

Air-injection system with major elements:

- (1) rotary-vane pump to inject air into exhaust manifold,
- (2) transmission controlled spark advance,
- (3) automatic hot air induction air cleaner,
- (4) distributor with specified advance characteristics,
- (5) carburetor with specified flow rates,
- (6) recommended maintenance; and

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Article 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080, of the Health and Safety Code,

Issue a resolution of approval to Isuzu Motors, Limited, with respect to its 1972-model vehicles, 6,000 pounds or less gross vehicle weight, of the engine families listed below:

<u>Engine Family Identification</u>	<u>Control System</u>	<u>Engine Size Cubic Inches</u>	<u>Vehicle Model</u>
G180	Air Injection	110.8	Isuzu KB 30

State of California

AIR RESOURCES BOARD

Staff Report

1972 Emission Control Systems Approval

Isuzu Motors Limited

October 20, 1971

Isuzu Motors Limited, Japan has submitted a complete application for 1972-model year approval of the exhaust emission control system for its Isuzu vehicles. The applicant elected to qualify these vehicles for meeting the 1972 exhaust emission standards by the optional test procedure.

The applicant's exhaust emission control system is of the air-injection type.

Projected Emissions of Each Test Vehicle

<u>Engine Family Identification</u>	<u>Engine Size Cubic Inches</u>	<u>Vehicle Number</u>	<u>Projected Exhaust Emissions at 50,000 Miles</u>		
			<u>HC-gms/mile</u>	<u>CO-gms/mile</u>	<u>NO<sub>2</sub>-gms/mile</u>
G180	110.8	KB30-8200021	1.5*	19*	2.3**
G180	110.8	KB30-8200022	2.5	27	2.8

\*E.P.A. Lab Data

\*\*Hitachi Sawa Lab Data

Each test vehicle met the 1972-model year emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide and 3.2 grams per mile oxides of nitrogen.

Based on the test data and other information submitted by the applicant, the staff finds that Isuzu Motors Limited exhaust emission control system meets California requirements for vehicles under 6,000 pounds gross vehicle weight for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-100.

State of California  
Air Resources Board

Resolution 71-101

October 20, 1971

WHEREAS, The Air Resources Board has been unable to approve liquefied petroleum gas and natural gas conversion systems when installed on heavy-duty vehicles for tax exemptions provided in AB 9 and AB 321 of 1970;

WHEREAS, AB 1848 of 1971, which has been passed and signed into law and which is effective immediately, automatically extends the tax exemptions to heavy-duty vehicles when converted with systems approved for installation on 1966 and later light-duty vehicles; and

WHEREAS, the conversion systems listed below have previously been approved by the Air Resources Board for 1966 and later light-duty vehicles;

NOW THEREFORE BE IT RESOLVED, that Air Resources Board finds that the liquefied petroleum and natural gas conversion systems for engine sizes described in Resolutions 70-9D, 70-16D, 70-34-F, 70-68-C, 71-29-B and 71-99-A, meet the emission requirements of Section 8657 of the Revenue and Taxation Code for gasoline-powered vehicles 6,001 pounds gross vehicle weight and over.

State of California  
AIR RESOURCES BOARD

Resolution 71-102

October 20, 1971

WHEREAS, Fiat, S.p.A. submitted an application and all required test data for approval of the exhaust emission control system for its 1972-model vehicles;

WHEREAS, the applicant's exhaust control system is described as follows:

An engine-modification type exhaust emission control system  
(including NOx control) with major elements:

- (1) carburetor with specified flow rates,
- (2) distributor with specified advance characteristics,
- (3) deceleration throttle positioner,
- (4) recommended maintenance, and

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Article 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080 of the Health and Safety Code,

Issue a resolution of approval to Fiat S.p.A. with respect to its 1972-model vehicles, 6,000 pounds or less gross vehicle weight, as listed below:

<u>Engine Family Identification</u>	<u>Engine Size Cubic Inches</u>	<u>Vehicle Models</u>
100	55.08	850 Sport Spider 850 Sport Coupe
128	68.1	128 Sedan 128 Sedan 2 door 128 Station Wagon
124	87.75	124 Special Sedan 124 Special Station Wagon
125	98.13	124 Sport Spider 1600 124 Sport Coupe 1600



State of California

AIR RESOURCES BOARD

1972 Emission Control Systems Approval

Fiat, S.p.A.

October 20, 1971

Fiat, S.p.A. has submitted a complete application for 1972-model year approval of the exhaust emission control system for the vehicles listed below. The applicant tested these vehicles and met the 1972 exhaust emission standards using the optional test procedure.

The applicant's exhaust emission control system is of the engine-modification type.

Projected Emissions of Each Test Vehicle

Engine Family Identification	Engine Size Cubic Inches	Vehicle Number	Projected Exhaust Emission at 50,000 Miles		
			HC-gms/mi	CO-gms/mi	NO <sub>2</sub> -gms/mi
100	55.08	0105245	2.3*	19*	2.6**
100	55.08	0110014	2.4	24	2.2
128	68.1	0632856	3.0*	27*	2.4**
128	68.1	0682801	2.4	27	2.0
124	87.75	0969696	1.6*	19*	2.5**
124	87.75	1017094	2.5	26	1.7
124	87.75	1014481	2.4	28	2.2
125	98.13	0167019	2.6*	36*	2.0**
125	98.13	0177656	2.4	25	2.0

\* EPA Confirmatory tests

\*\* Ethyl Corporation confirmatory tests

Each test vehicle met the 1972-model year emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide and 3.2 grams per mile oxides of nitrogen.

Confirmatory tests conducted at the Environmental Protection Agency laboratory and the Ethyl Corporation laboratory substantiate the manufacturer's data.

Based on the test data and other information submitted by the applicant, the staff finds that Fiat exhaust emission control system meets California requirements for vehicles under 6,000 pounds gross vehicle weight for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-102.

State of California

AIR RESOURCES BOARD

Resolution 71-102 A

February 16, 1972

WHEREAS, Fiat, S.p.A. submitted an application and all required test data for approval of the exhaust emission control system for additional 1972-model vehicles;

WHEREAS, the applicant's exhaust control system is described as follows:

An engine-modification type exhaust emission control system  
(including NO<sub>x</sub> control) with major elements;

- (1) carburetor with specified flow rates,
- (2) distributor with specified advance characteristics,
- (3) deceleration throttle positioner,
- (4) recommended maintenance, and

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Subchapter 1 and Subchapter 2, Article 2 and 3,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Under the powers and authority granted in Chapter 4, commencing at Section 39080 of the Health and Safety Code,

Issue a resolution of approval to Fiat S.p.A. with respect to its 1972-model vehicles, 6,000 pounds or less gross vehicle weight, as listed below:

<u>Engine Family Identification</u>	<u>Engine Size Cubic Inches</u>	<u>Vehicle Models</u>
100	55.08	850 Sport Spider(Comp.Ratio 8.5:1) 850 Sport Coupe(Comp.Ratio 8.5:1)
128	78.7	128 Sedan 1300 128 Sedan 1300 2 door 128 Station Wagon 1300 128 Coupe 1300

State of California

AIR RESOURCES BOARD

1972 Emission Control Systems Approval

Fiat, S.p.A.

February 16, 1972

Fiat, S.p.A. has submitted a complete application for 1972-model year approval of the exhaust emission control system for the additional vehicles listed below. The applicant tested these vehicles and met the 1972 exhaust emission standards using the optional test procedure.

The applicant's exhaust emission control system is of the engine-modification type.

Projected Emissions of Each Test Vehicle

<u>Engine Family Identification</u>	<u>Engine Size Cubic Inches</u>	<u>Vehicle Number</u>	<u>Projected Exhaust Emission at 50,000 Miles</u>		
			<u>HC-gms/mi</u>	<u>CO-gms/mi</u>	<u>NO<sub>2</sub>-gms/mi</u>
100	55.08	0110393	2.1	23.6	2.0
128	78.7	0736680	2.1	25.8	1.6
128	78.7	0740582	2.2*	33.3*	2.0**

\* EPA Confirmatory Tests

\*\* Ethyl Corporation Confirmatory Tests

Each test vehicle met the 1972-model year emission standards of 3.2 grams per mile hydrocarbons, 39 grams per mile carbon monoxide and 3.2 grams per mile oxides of nitrogen.

Confirmatory tests conducted at the Environmental Protection Agency laboratory and the Ethyl Corporation laboratory substantiate the manufacturer's data.

Based on the test data and other information submitted by the applicant, the staff finds that Fiat exhaust emission control system meets California requirements for vehicles under 6,000 pounds gross vehicle weight for the 1972-model year. The staff, therefore, recommends adoption of Resolution 71-102 A.

State of California

AIR RESOURCES BOARD

Resolution 71-103

October 20, 1971

WHEREAS, the Air Resources Board has established agricultural guidelines regulating burning of agricultural waste;

WHEREAS, the Air Resources Board is in the process of developing agricultural guidelines regulating burning for range improvement and forest management; and

WHEREAS, it is not the intent of the Air Resources Board to control or prohibit burning for range improvement or forest management until such guidelines are completed;

NOW, THEREFORE, BE IT RESOLVED, that Section 80140 is added to the Air Resources Board's Agricultural Burning Guidelines as adopted in Title 17 of the California Administrative Code to read as follows:

80140. Pending completion of additional guidelines regulating burning for range improvement and forest management, nothing in these guidelines shall be construed to affect such burning, and such burning may continue beyond December 31, 1971, unless otherwise regulated by county or regional air pollution control districts.

BE IT FURTHER RESOLVED, that the following finding of emergency is adopted:

The Air Resources Board finds that an emergency exists and that the foregoing regulation is necessary for the immediate preservation of the public health and safety and general welfare. A statement of the facts constituting such an emergency is that Section 39296 of the Health and Safety Code prohibits open burning after December 31, 1971, but that prohibition does not apply to burning for range improvement and forest management and there is immediate need to make this manifest in the Air Resources Board's Agricultural Burning Guidelines.

STATE OF CALIFORNIA

AIR RESOURCES BOARD

RESOLUTION 71-103A

November 17, 1971

WHEREAS, Resolution 71-103, which adds Section 80140 to Title 17 of the California Administrative Code, was adopted on October 20, 1971 as an emergency regulation; and

WHEREAS, On November 17, 1971 the Air Resources Board held a public hearing on the addition of Section 80140 pursuant to law;

NOW, THEREFORE, BE IT RESOLVED, That after the public hearing as required by law, Resolution 71-103, adding Section 80140 to Title 17 of the California Administrative Code, is hereby confirmed.

STATE OF CALIFORNIA

AIR RESOURCES BOARD

November 17, 1971

Public Hearing

Addition of Section 80140 to Title 17 of the  
California Administrative Code

At the October 20, 1971 meeting, the Board adopted an emergency regulation (Resolution 71-103) adding Section 80140 to the Air Resources Board's Agricultural Burning Guidelines as adopted in Title 17 of the California Administrative Code as follows:

80140. Pending completion of additional guidelines regulating burning for range improvement and forest management, nothing in these guidelines shall be construed to affect such burning, and such burning may continue beyond December 31, 1971, unless otherwise regulated by county or regional air pollution control districts.

This is a public hearing on the addition of Section 80140 to Title 17 of the California Administrative Code. The public hearing, for which a notice was issued on October 15, 1971, is required to affirm the Board's emergency action taken at the October 20 meeting. No statements or arguments relevant to the emergency action have been received to date.

Approval of Resolution 71-103A is recommended.

State of California

AIR RESOURCES BOARD

Resolution 71-104

WHEREAS, since the Air Resources Board adopted regulations requiring assembly-line testing the official federal and state approval test procedures have been changed to employ a test cycle considerably different from the seven-mode cycle, thus making the seven-mode hot test less appropriate as an assembly-line test

WHEREAS, several automobile manufacturers have recently reported a poor relationship between the hot seven-mode test and the official approval procedure, and

WHEREAS, it appears that alternate tests may be used which could be comparable in effectiveness in controlling the emissions from new vehicles and be less costly than the existing assembly line test procedures

WHEREAS, a steady state no load test method supplemented by proper functional tests is now under study by the Board,

NOW, THEREFORE BE IT RESOLVED, that the Air Resources Board intends to amend its assembly-line test regulations for 100 percent testing of production vehicles for 1973 model vehicles,

BE IT FURTHER RESOLVED, that until such alternative test procedures are adopted all manufacturers be notified of this intent.

State of California

AIR RESOURCES BOARD

Resolution 71-104A

December 15, 1971

WHEREAS, Section 39052(m) of the Health and Safety Code requires the Air Resources Board to adopt emission standards and test procedures for the testing of vehicles on factory assembly lines;

WHEREAS, compliance with the provisions of Sections 39068.1 and 39152 of the Health and Safety Code required the adoption of the aforementioned emission standards and test procedures;

WHEREAS, the Air Resources Board adopted Resolution 71-104 requiring that all vehicle manufactures be notified of its intent to amend its assembly-line test regulations for 100 per cent testing or production vehicles commencing with the 1973 model year, and

WHEREAS, an emergency exists as stated in the Finding of Emergency set forth below;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board hereby adopts and amends, as an emergency, regulations in Title 13, Chapter 3, California Administrative Code, as follows:

Adopts new Section 1947 to read:

1947. Exhaust Emissions (Assembly-Line). The emission standards for vehicles tested on factory assembly lines shall be identical to the new car approval standards adopted in Section 1944 and Section 1946. The procedures for determining compliance with these standards are specified in Sections 2110(c) and 2209(a).

Amends Subsection (b) of Section 2110 to read:

(b) Beginning July 1, 1971 new motor vehicles will be tested in compliance with the Air Resources Board's "California Assembly-Line Test Procedures", dated September 16, 1970, amended February 17, 1971. This subsection shall not be applicable after the 1972 model year production.

Adopts new Subsection (c) of Section 2110 to read:

(c) Beginning with the 1973 model-year, new light-duty motor vehicles shall be assembly-line tested in compliance with the Air Resources Board's "California Assembly-Line Test Procedures for 1973 and Subsequent Model Light-Duty Vehicles, dated December 15, 1971.



Adopts new Section 2209 to read:

2209. Test Procedure for Assembly-Line or Pre-Delivery Testing.

Beginning with the 1973 model-year new light-duty motor vehicles shall be assembly-line tested in compliance with the Air Resources Board's "California Assembly-Line Test Procedures for 1973 and Subsequent Model Light-Duty Vehicles," dated December 15, 1971.

BE IT FURTHER RESOLVED, that the following Finding of Emergency is adopted.

FINDING OF EMERGENCY

The State Air Resources Board finds that an emergency exists and that the foregoing regulations are necessary for the immediate preservation of the public peace, health and safety or general welfare. A statement of the facts constituting such emergency is:

Motor vehicle manufacturers need sufficient lead time to build the necessary facilities and procure the instrumentation required to comply with these proposed regulations.

The said regulations are therefore adopted as emergency regulations, to take effect immediately upon filing with the Secretary of State as provided in Section 11422(c) of the Government Code.

State of California  
AIR RESOURCES BOARD  
Resolution 71-104B

WHEREAS, Resolution 71-104A, which adds Sections 1947, 2209, and Subsection 2110(c) and amends Subsection 2110(b) to Chapter 3 of Title 13 of the California Administrative Code, was adopted on December 15, 1971 as an emergency regulation; and

WHEREAS, on January 19, 1971 the Air Resources Board held a public hearing on the addition of Sections 1947, 2209, and Subsection 2110(c) and on the amendment of Subsection 2110(b) pursuant to law;

NOW, THEREFORE, BE IT RESOLVED, That after the public hearing as required by law, Resolution 71-104A, adding Sections 1947, 2209, and Subsection 2110(c) and amending Subsection 2110(b) to Chapter 3 of Title 13 of the California Administrative Code, is hereby confirmed.

State of California

AIR RESOURCES BOARD

February 16, 1972

Staff Report

Seven Mode Assembly Line Testing in Excess of 25%

At the January 19, 1971 meeting, the Board briefly discussed a manufacturer's request that it be allowed to do more than 25% 7-mode testing for a few of its 1973 models, with a corresponding reduction in steady-state testing. No objections were raised, but it was unclear whether Board action is necessary.

The staff is satisfied that Board action is necessary. Either the test procedure can be amended, or a statement of interpretation can be adopted. Because (1) the matter is relatively minor, (2) the additional testing will probably improve the reliability of data submitted and (3) the staff anticipates no objections, the staff recommends that the following statement of interpretation be adopted rather than proceeding with a public hearing and formal amendments to the administrative regulations and test procedures.

State of California

AIR RESOURCES BOARD

February 16, 1972

Resolution 71-104C

WHEREAS, the Air Resources Board's "California Assembly-Line Test Procedures for 1973 and Subsequent Model Light-Duty Vehicles" adopted December 15, 1971, require, commencing on January 31, 1973, 25% testing by the 7-mode cycle and 75% by the steady state method;

WHEREAS, one manufacturer has requested that it be permitted to increase the percentage of 7-mode testing; and

WHEREAS, such additional 7-mode testing may be advantageous and probably will not be disadvantageous.

NOW, THEREFORE, BE IT RESOLVED that the Air Resources Board's "California Assembly-Line Test Procedures for 1973 and Subsequent Model Light-Duty Vehicles", adopted December 15, 1971, be interpreted to permit, commencing January 31, 1973 more than 25% testing by the 7-mode cycle, and a corresponding reduction in steady state testing;

RESOLVED FURTHER that no manufacturer may test more than 25% by the 7-mode cycle without prior written approval of the Executive Officer; and

RESOLVED FURTHER that reports of assembly-line testing required by the assembly-line test procedure clearly identify the percentage of vehicles tested by each method when more than 25% of the vehicles are tested by the 7-mode cycle.

State of California

AIR RESOURCES BOARD

Resolution 71-104D

December 20, 1972

WHEREAS, Section 39052(m) of the Health and Safety Code requires the Air Resources Board to adopt emission standards and test procedures for the testing of vehicles on factory assembly-lines; and

WHEREAS, compliance with the provisions of Section 39068.1 and 39152 of the Health and Safety Code required the adoption of the aforementioned emission standards and test procedures;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board hereby amends, effective January 1, 1973, its California Assembly-Line Test Procedures for 1973 and Subsequent Model Light-Duty Vehicles, as specified in the staff report dated December 20, 1972; and

BE IT FURTHER RESOLVED, that the Air Resources Board hereby amends regulations in Title 13, Chapter 3, California Administrative Code, as follows:

Amends Section 2051 to read:

Beginning with the 1973 model-year, new light-duty motor vehicles shall be assembly-line tested in compliance with the Air Resources Board's "California Assembly-Line Test Procedures for 1973 and Subsequent Model Light-Duty Vehicles, dated December 15, 1971, amended December 20, 1972". The amendments of December 20, 1972 become effective January 1, 1973.

State of California

AIR RESOURCES BOARD

Resolution 71-105

Bendix (Zenith)

Exhaust Emission Control System (Forklifts)

October 20, 1971

WHEREAS, the Bendix Corporation submitted an application and all test data for California certification of an exhaust emission control system for internal combustion engines used in forklifts and other similar equipment in enclosed structures;

WHEREAS, the applicant's exhaust emission control system consists of a properly designed gasoline carburetor with major elements:

- (1) leaner air-fuel ratio,
- (2) fixed jets in main metering system,
- (3) limited idle mixture adjustment,
- (4) recommended maintenance; and

WHEREAS, the Board finds that the system complies with the California Administrative Code, Title 13, Chapter 3, Subchapter 2, Article 5;

NOW, THEREFORE, BE IT RESOLVED, That the Air Resources Board,

Under the powers and authority granted in Chapter 4, commencing at Section 39080, Division 26 of the Health and Safety Code, and pursuant to the request of the Division of Industrial Safety, approves the Bendix (Zenith) exhaust emission control system for new internal combustion engines used in forklifts and other similar equipment in enclosed structures for the following engine size :

Engine Size Class

B

Engine Size Displacement

140-200 cubic inches

State of California

AIR RESOURCES BOARD

Resolution 71-106

October 20, 1971

WHEREAS, research proposals have been submitted to the Air Resources Board under the provisions of SB 848 (1970 Stats. Ch. 1599) in response to the Board's request for proposals entitled: "Field Study of Regional Air Pollution Transport in the South Coast and San Diego Air Basins," (RFP IV), issued on July 10, 1971;

WHEREAS, the Research Proposal Screening Committee has evaluated these proposals as required under SB 848; and

WHEREAS, the Screening Committee has recommended for funding the proposal:

ARB Proposal Number 4G-193-7, submitted by Metronics Associates, Inc. in the amount of \$258,785;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board under the powers and authority granted in SB 848 (1970 Stats. Ch. 1599) hereby accepts the recommendations of the Research Proposal Screening Committee and approves the proposal submitted under SB 848 subject to the revision of the experimental plan and subsequent approval for revised statement of work by the Air Resources Board staff:

ARB Proposal Number 4G-193-7, submitted by Metronics Associates, Inc. in the amount of \$258,785,

and authorizes the Executive Officer to initiate administrative procedures and to execute all necessary documents and contracts for the research effort proposed in an amount not to exceed \$258,785.

State of California

AIR RESOURCES BOARD

Resolution 71-107

October 20, 1971

WHEREAS, research proposals have been submitted to the Air Resources Board under the provisions of SB 848 (1970 Stats. Ch. 1599) in response to the Board's request for proposals entitled: "Atmospheric Simulation Modeling of Motor Vehicle Emissions in the Vicinity of Roadways," (RFP IV), issued July 10, 1971;

WHEREAS, the Research Proposal Screening Committee has evaluated these proposals as required under SB 848; and

WHEREAS, the Screening Committee has recommended for funding the proposal:

ARB Proposal Number 5D-207-7, submitted by Systems, Science and Software Company, in the amount of \$64,875;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board under the powers and authority granted in SB 848 (1970 Stats. Ch. 1599) hereby accepts the recommendations of the Research Proposal Screening Committee and approves the proposal submitted under SB 848 subject to the review and approval of the proposal by the Air Resources Board meteorological staff:

ARB Proposal Number 5D-207-7, submitted by Systems, Science and Software Company, in the amount of \$64,875,

and authorizes the Executive Officer to initiate administrative procedures and to execute all necessary documents and contracts for the research effort proposed in an amount not to exceed \$64,875.



State of California

AIR RESOURCES BOARD

Resolution 71-108

October 20, 1971

WHEREAS, research proposals have been submitted to the Air Resources Board under the provisions of SB 848 (1970 Stats. Ch. 1599) in response to the Board's request for proposals entitled, "Contribution of Freeway Traffic to Airborne Particulate Matter," (RFP-IV);

WHEREAS, the Research Proposal Screening Committee has evaluated these proposals as required under SB 848; and

WHEREAS, the Screening Committee has recommended for funding the proposal:

ARB Proposal Number 4B-184-7, submitted by the University of California at Davis, in the amount of \$116,220;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board under the powers and authority granted in SB 848 (1970 Stats. Ch. 1599) hereby accepts the recommendations of the Research Proposal Screening Committee and approves the proposal submitted under SB 848:

ARB Proposal Number 4B-184-7, submitted by the University of California at Davis, in the amount of \$116,220;

and authorizes the Executive Officer to initiate administrative procedures and to execute all necessary documents and contracts for the research effort proposed in an amount not to exceed \$116,220.

State of California

AIR RESOURCES BOARD

Resolution 71-109

October 20, 1971

WHEREAS, research proposals have been submitted to the Air Resources Board under the provisions of SB 848 (1970 Stats. Ch. 1599);

WHEREAS, the Research Proposal Screening Committee has evaluated these proposals as required under SB 848; and

WHEREAS, the Screening Committee has recommended for funding the proposal:

ARB Proposal Number 2-182-5, Revised, submitted by Clean Air Research Company, entitled, "Pilot Implementation of Two Promising Controls for Used Car Exhaust Emissions," in the amount of \$185,956;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board under the powers and authority granted in SB 848 (1970 Stats. Ch. 1599) hereby accepts the recommendations of the Research Proposal Screening Committee and approves the proposal submitted under SB 848:

ARB Proposal Number 2-182-5, Revised, submitted by Clean Air Research Company, entitled, "Pilot Implementation of Two Promising Controls for Used Car Exhaust Emissions," in the amount of \$185,956,

and authorizes the Executive Officer to initiate administrative procedures and to execute all necessary documents and contracts for the research effort proposed in an amount not to exceed \$185,956.

State of California

AIR RESOURCES BOARD

November 17, 1971

Resolution 71-110

WHEREAS, Legislation enacted in the 1971 legislative session pertains to the addition of an oxides of nitrogen control device to specified motor vehicles of 1966 through 1970 model years, as made available, by an act which adds Sections 39107.6, 39177.1, 39177.2, 39177.3 and 39177.4 to the Health and Safety Code;

WHEREAS, Section 39177.3 requires the Board to establish the tests and procedures for accrediting these devices; and

WHEREAS, a public hearing and other proceedings have been held in accordance with the provisions of the Administrative Procedure Act (Government Code, Title 2, Division 3, Part 1, Chapter 4.5);

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board hereby adopts regulations in Title 13, Chapter 3, California Administrative Code as follows:

Adopts Subsection (f) of Section 2208 to read:

- (f) The test procedures for determining compliance with the device standard for oxides of nitrogen as specified in Section 39107.6 of the Health and Safety Code are those set forth in "California Oxides of Nitrogen Control Device Test Procedures for Used 1966 through 1970 Model Year Motor Vehicles under 6001 Pounds Gross Vehicle Weight" adopted by the Air Resources Board on November 17, 1971.

and

BE IT FURTHER RESOLVED, that the test procedures entitled "California Oxides of Nitrogen Control Device Test Procedures for Used 1966 through 1970 Model Year Vehicles Under 6001 Pounds Gross Vehicle Weight", dated November 17, 1971, are hereby adopted.

STATE OF CALIFORNIA

AIR RESOURCES BOARD

RESOLUTION 71-111

November 17, 1971

WHEREAS, on March 17, 1971 the Board adopted, pursuant to Section 39298.2 of the Health and Safety Code, Agricultural Burning Guidelines for the regulation and control of agricultural burning in Subchapter 2, Chapter 1, Part III, Title 17, California Administrative Code; and

WHEREAS, Section 39298.8 of the Health and Safety Code requires Air Pollution Control Districts to adopt an implementation plan consistent with these guidelines for regulation and control of agricultural burning; and

WHEREAS, Section 39298.9 of the Health and Safety Code requires the Air Pollution Control Districts to submit the adopted Agricultural Burning Implementation Plans to the Board and requires the Board to approve, modify or reject the plan; and

WHEREAS, The Air Pollution Control Districts of Amador and Santa Barbara have submitted agricultural burning implementation plans consistent with the Board's Agricultural Burning Guidelines but not including the form of the burning permit;

NOW, THEREFORE, BE IT RESOLVED, That the agricultural burning implementation plans of the Amador and Santa Barbara Air Pollution Control Districts are approved at such time as a satisfactory burning permit is submitted.

State of California  
AIR RESOURCES BOARD

November 17, 1971

Resolution 71-113

Surveillance of Assembly-Line Testing

WHEREAS, the Air Resources Board's regulations presently require the testing of 25 percent of vehicles on assembly lines and such testing increases to 50 percent commencing with 1973 models and further to 100 percent on February 1, 1973; and

WHEREAS, the Air Resources Board finds it desirable to develop a surveillance program to observe the manner in which assembly-line testing is conducted, and to determine its benefits;

NOW, THEREFORE, BE IT RESOLVED, that Article 2 be added to Subchapter 3, Chapter 3, Title 13, California Administrative Code, to read as follows:

Article 2

Surveillance Testing

2850. Assembly-Line Testing and Reimbursement of Costs.

(a) Each manufacturer offering new vehicles for sale in California shall make available to the Air Resources Board at reasonable times and upon reasonable written notice its facilities for the purpose of observing assembly-line testing conducted pursuant to Section 2110. Facilities shall be made available for the Board to conduct its own assembly-line tests with the manufacturer's or the Board's own equipment. The Board's costs of transportation and lodging of personnel, transportation of equipment and other similar costs directly related to the Board's surveillance of a manufacturer's assembly-line testing shall be reimbursed by the manufacturer.

(b) In lieu of surveillance at assembly lines, a manufacturer and the Executive Officer of the State Air Resources Board may agree (1) to the Board's surveillance testing in California at a point or points mutually satisfactory to both, or (2) to surveillance being conducted by an independent laboratory pursuant to instructions of the Executive Officer. In either event, costs such as those enumerated in subdivision (a) shall be borne by the manufacturer, including the cost of services of an independent laboratory. The Executive Officer shall endeavor to conduct assembly-line surveillance testing under this subdivision with respect to manufacturers whose assembly lines are outside the continental United States.

State of California  
AIR RESOURCES BOARD

November 17, 1971

Resolution 71-114

Emergency Employment Act

WHEREAS, Congress passed the Emergency Employment Act of 1971;

WHEREAS, the Act authorizes financial assistance to eligible applicants who agree to provide employment for unemployed or under-employed workers in need of public services;

WHEREAS, the federal government may not pay more than 90 percent of the cost of carrying out an approved program, except in unusual circumstances, and the remaining 10 percent must be contributed by the participating governmental unit; and

WHEREAS, the Air Resources Board is an eligible governmental unit under the Act and has applied for and has been approved to employ temporarily five (5) additional personnel to serve a definite need in the vehicle emissions control program in the Los Angeles area.

NOW, THEREFORE, BE IT RESOLVED that the Air Resources Board authorizes the Executive Officer to initiate administrative procedures and to execute all necessary documents and contracts to fulfill the provisions of the Act including the authority to utilize salary savings not to exceed \$6,000 for this purpose during fiscal year 1971-72.

State of California

AIR RESOURCES BOARD

Resolution 71-115

November 17, 1971

WHEREAS, in 1969, the California Legislature added Section 39052 (q), Section 39110 and Section 39111 to the Health and Safety Code requiring the Air Resources Board to adopt regulations specifying the manner in which motor vehicles modified or altered to use fuels other than gasoline or diesel be emission tested;

WHEREAS, on November 9, 1969, the Air Resources Board adopted, "California Exhaust Emission Standards and Test Procedures for Motor Vehicles Modified to Use Liquefied Petroleum Gas or Natural Gas Fuel;"

WHEREAS, Pneumetrics, Inc., has submitted an application and all test data for approval of its emission control system for vehicle modified to utilize Natural Gas and Gasoline (Dual Fuel); and

WHEREAS, the Board finds that the system complies with the Health and Safety Code Sections 39052 (q) and 39110 and the California Administrative Code, Title 13, Section 2600,

NOW, THEREFORE, BE IT RESOLVED, That the Air Resources Board approve the Pneumetrics carburetor model listed below for use in gasoline-powered vehicles utilizing natural gas and gasoline (dual fuel) with engine size class as listed:

<u>Carburetor Model</u>	<u>Engine Size Class</u>	<u>Engine Size Displacement Cubic Inches</u>
Imperial 300 AN	(e)	300-375

State of California

AIR RESOURCES BOARD

Staff Report

Pneumetrics, Inc.,

Application for Motor Vehicles Modified  
To Use Natural Gas and Gasoline (Dual Fuel)

November 17, 1971

Pneumetrics, Inc., has submitted an application for approval of its emission control system to be used on vehicles modified to use natural gas and gasoline (dual fuel). The carburetor that Pneumetrics will use is manufactured by Impeco Division of A. J. Industries and is identical in all respects to Model CA 300 AN previously approved by the Board. This firm, however, prefers to have its corporate name stamped on the equipment and wishes to be identified as an approved company under its own label.

The data submitted is shown below:

<u>Carburetor</u> <u>Model</u>	<u>Engine Size</u> <u>Class</u>	<u>Test Engine</u> <u>Size Cu.In.</u>	<u>Test</u> <u>Vehicle</u>	<u>HC-gms/mi</u>	<u>CO-gms/mi</u>	<u>NO<sub>2</sub>-gms/mi</u>
Imperial 300 AN	(e)	302	1969 Ford	0.7	2.6	0.8
Imperial 300 AN	(e)	307	1968 Chev	0.6	3.1	1.3

Each test vehicle in the fleet met the 1971 emission standards of 2.2 grams per mile hydrocarbons, 23 grams per mile carbon monoxide, and 4 grams per mile oxides of nitrogen.

The emission results on natural gas also meet the 1974-model year standards and, therefore, meet the emission requirements of Section 8657 of the Revenue and Taxation Code.

Based on the test data and other information submitted by the applicant, the staff finds that the Pneumetrics emission control system, to be used on vehicles modified to use natural gas, meets California requirements. The staff, therefore, recommends the adoption of Resolution 71-115 and 71-115-A.



State of California

AIR RESOURCES BOARD

Resolution 71-115-A

November 17, 1971

WHEREAS, in 1970, the California Legislature added Section 8657 to the California Revenue and Taxation Code which states that no motor fuel tax shall be imposed upon motor vehicles modified to use liquefied petroleum gas or natural gas and approved by the State Air Resources Board as meeting the emission standards act set forth in subdivisions (a) and (b) of Section 39102 and Section 39102.5 of the Health and Safety Code;

WHEREAS, the Air Resources Board has approved the Pneumetrics, Inc., system for converting gasoline engines to use natural gas and gasoline (dual fuel); and

WHEREAS, the Board found that the system complied with the California Administrative Code, Title 13, Section 2600,

NOW, THEREFORE, BE IT RESOLVED, That this Board

Find that Pneumetrics' carburetor model listed below utilizing natural gas and gasoline (dual fuel) will meet the emission requirements of Section 8657 of the Revenue and Taxation Code for gasoline-powered vehicles:

<u>Carburetor Model</u>	<u>Engine Size Class</u>	<u>Engine Size Displacement Cubic Inches</u>
Imperial 300 AN	(e)	300-375

STATE OF CALIFORNIA

AIR RESOURCES BOARD

RESOLUTION 71-116

December 15, 1971

WHEREAS, complaints of the air pollution resulting from operations of the Kaiser Steel Plant at Fontana, San Bernardino County, have been received by the Board; and

WHEREAS, a study has been made by the Board which indicates that the ambient air quality standards have been exceeded in the area of the Kaiser Steel Plant; and

WHEREAS, Section 39054 of the State Health and Safety Code authorizes the Air Resources Board to take action, if after investigation it is found that the ambient air quality standards are not being met or it is determined that the local authority has not taken reasonable action to control emissions.

NOW, THEREFORE, BE IT RESOLVED, That the Executive Officer shall transmit a copy of the report, "Survey of Air Pollution From the Kaiser Steel Plant, Fontana, California" to the San Bernardino County Air Pollution Control District.

AND BE IT FURTHER RESOLVED, That the Executive Officer, pursuant to Section 39054 of the Health and Safety Code, request the San Bernardino County Air Pollution Control District to submit a report within 90 days as to the action taken to control emissions from the Kaiser Steel Plant.

State of California

AIR RESOURCES BOARD

November 17, 1971

Resolution 71-117

Emissions Reduction on  
Public Transit Diesel Buses

WHEREAS, diesel powered buses emit from the exhaust a significant amount of hydrocarbons into the ambient air;

WHEREAS, a diesel fuel injector has been developed which reduces hydrocarbon exhaust emissions by more than 70%; and

WHEREAS, public transportation agencies operate large numbers of diesel powered buses in metropolitan areas where air pollution is most severe;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board urges all diesel powered vehicles to be altered with fuel injectors which will substantially reduce hydrocarbon emissions and instructs the Executive Officer to take such steps as may be available to carry out the above policy, particularly by encouraging public transportation agencies to retrofit existing buses and to specify such injectors in new buses.

State of California

AIR RESOURCES BOARD

Resolution 71-118

November 17, 1971

WHEREAS, research proposals have been submitted to the Air Resources Board under the provisions of SB 848 (1970 Stats. Ch. 1599) in response to the Board's Request for Proposals entitled, "Vehicle Inspection Instrumentation," issued on July 10, 1971;

WHEREAS, the Research Proposal Screening Committee has evaluated these proposals as required under SB 848; and

WHEREAS, the Screening Committee has recommended for funding the proposal:

ARB Proposal Number 3C-235-7 submitted by Lockheed Palo Alto Research Laboratory in the amount of \$116,400;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board under the powers and authority granted in SB 848 (1970 Stats. Ch. 1599) hereby accepts the recommendations of the Research Proposal Screening Committee and approves the proposal submitted under SB 848:

ARB Proposal Number 3C-235-7 submitted by Lockheed Palo Alto Research Laboratory in the amount \$116,400;

and authorizes the Executive Officer to initiate administrative procedures and to execute all necessary documents and contracts for the research effort proposed in an amount not to exceed \$116,400.

State of California

AIR RESOURCES BOARD

Combustion Control, Incorporated  
Experimental Permit

RESOLUTION 71-119

December 15, 1971

WHEREAS, Combustion Control, Incorporated, Subsidiary of Systron Donner Corporation, One Systron Drive, Concord, California has applied for two permits to test an experimental pollution control device installed on two motor vehicles;

WHEREAS, the device, which consists of an adapter to change the shape and volume of the combustion chamber, an auxilliary fuel supply manifold and adjustments to the air/fuel ratio and spark timing, appears to have very low emission characteristics;

WHEREAS, Section 39181 of the Health and Safety Code authorizes the Board to issue permits for testing such devices;

NOW, THEREFORE, BE IT RESOLVED, Combustion Control Incorporated is hereby granted two permits for testing its experimental pollution control device installed on two motor vehicles for a period of one year from this date.

State of California  
AIR RESOURCES BOARD

Resolution 71-120

December, 1971

WHEREAS, Checker Motors Corporation submitted an application and all required test data for approval of the exhaust emission control system for its 1972-model light-duty vehicles;

WHEREAS, the applicant's exhaust control system is described as follows:

An air-injection type exhaust emission control system called "A.I.R." (including NOx control) with major elements:

- (1) air pump with air injection into the exhaust ports,
- (2) carburetor with specified flow rates,
- (3) distributor with specified advance characteristics,
- (4) vehicle speed controlled spark advance,
- (5) temperature sensing switches,
- (6) recommended maintenance, and

WHEREAS, the Board finds that the system complies with the Health and Safety Code Section 39052.5 and the California Administrative Code, Title 13, Sections 1944, 2109(h) and 2208(d);

NOW, THEREFORE, BE IT RESOLVED, That the Air Resources Board approve the Checker Motors Corporation emission control system for its 1972-model vehicles, 6,000 pounds or less gross vehicle weight, of the engine families listed below:

Engine Family GM-102

Engine Size - 250 cubic inches

Models - 6 passenger Taxicab (A-11),  
8 passenger Taxicab (A-11E),  
6 passenger Marathon sedan (A-12)  
8 passenger Marathon sedan (A-12E)  
6 passenger Marathon Wagon (A-12W)

Engine Size - 350 cubic inches

Models - 6 passenger Taxicab (A-11)  
8 passenger Taxicab (A-11E),  
6 passenger Marathon sedan (A-12),  
8 passenger Marathon sedan (A-12E)  
6 passenger Marathon Wagon (A-12W),  
12 passenger Aerobus (A-12 W8).

State of California

AIR RESOURCES BOARD

Chevron Research Company  
Experimental Permit

RESOLUTION 71-121

December 15, 1971

WHEREAS, Chevron Research Company, 576 Standard Avenue, Richmond, California has applied for a permit to test an experimental pollution control device installed on a motor vehicle;

WHEREAS, the device which consists of an electronic fuel injection system designed to decrease emissions from motor vehicles appears to have very low emission characteristics; and

WHEREAS, Section 39181 of the Health and Safety Code authorizes the Board to issue permits for testing such devices;

NOW, THEREFORE, BE IT RESOLVED, Chevron Research Company is hereby granted a permit for testing its experimental pollution control device installed on a motor vehicle for a period of one year from this date.